Hugh Cecil Earl of Lonsdale.

1831.

179 Remarks on the Condition of Hunters, the choice of horses, and their management: In a series of familiar letters, originally published in the "Sporting Magazine" between 1822 and 1825. With notes and a copious index. By Nimrod [Charles James Apperley].

Si quid novisti rectius istis
Candidus imperti: si non, his utere mecum.
—HORACE.

London. 1831.

8vo. 503 pp. M., $8\frac{3}{4}$ in. by $5\frac{1}{2}$ in.

REMARKS

ON THE

CONDITION OF HUNTERS,

THE CHOICE OF HORSES,

AND

THEIR MANAGEMENT:

In a Series of Familiar Letters, originally Published in The Sporting Magazine between 1822 and 1828.

BY NIMROD.

WITH NOTES AND A COPIOUS INDEX.

Si quid novisti rectius istis,
Candidus imperti: si non, his utere mecum.
HORACE.

London:

PRINTED AND PUBLISHED BY M. A. PITTMAN,

18, WARWICK SQUARE:

Sold also by J. M. Richardson, 23, Cornhill; Chapple, Pall Mall; Booth, Portland Place; and R. Ackermann, jun. Eclipse Sporting Gallery, Regent Street.

1831.

ADVERTISEMENT.

THE very flattering way in which the "Letters on Condition" were received by the Sporting World generally on their first publication, coupled with the fact that no positive instructions relative to this interesting topic are to be met with in the numerous farriery books already before the public, and of the almost total silence of our veterinary writers regarding a subject of such paramount importance to owners of studs, has induced the Proprietors of the SPORTING MAGAZINE (in which old-established Work they originally appeared at intervals from 1822 to 1828), in compliance with numerous and repeated applications from Noblemen and Gentlemen, not only in this country, but on the Continent and in our Settlements abroad, to collect and reprint them in one uniform volume.

It may be proper to state, that not the slightest alteration has been made from the originals by the individual on whom the task devolved of preparing them for the press: he has merely added some notes by way of explanation or elucidation, required by the lapse of time and the change of circumstances under which they now appear. For the convenience of the reader, and for facilitating reference, the volume is accompanied with a very copious Index.

London, October 1831.

CONTENTS.

Page

INTRODUCTION 1

LETTER I.—Condition of Hunters 3

LETTER II.—Objections against turning hunters out to a summer's run at Grass—Physic 38

LETTER III.—The effects of Condition—the stable, and stable management 55

LETTER IV.—Stable management continued—case of Ferryman 68

LETTER V.—Hot and cold stables—treatment after a severe day—clothing—hay and water—cleanliness—over-reaching 77

LETTER VI.—Strong work indispensable—ill effects of too much rest—necessary qualification of the groom 90

LETTER VII.—Treatment of hunters in the summer 103

LETTER VIII.—Hard Meat *versus* Grass—Physic—Exercise 111

LETTER IX.—On the Foot 130

LETTER X.—On the Foot, in continuation 142

LETTER XI.—Condition resume 158

LETTER XII.—Precautions to be taken in the moulting season—sweating 167

LETTER XIII.—Treatment after a hard and long run—Clipping 185

LETTER XIV.—Objections answered 209

Page

LETTER XV.—Advice to Farmers—Breeding—Treatment of brood mares and colts—Clipping..219

LETTER XVI.—Advantages of Clipping—Salt Marshes—Hay—Green Meat 236

LETTER XVII.—Disadvantages of Clipping—Treatment—Comparative expense of summering in the stable and at grass—Firing 255

LETTER XVIII.—Condition of Hunters resumed..... 276

Apoplexy, Staggers, Vertigo, or Megrims..281

Broken Wind 283

Bangs and Blows 286

Broken Knees 287

Blisters 288

Blindness 290

Blood Vessels 297

Bleeding 297

Curbs 300

Corns 302

Capped Hocks 304

Castration 304

Crib Biting 305

Catarrh or Cold 306

Colic 307

Coat and Clipping 310

Cutting or Interfering 314

Distemper 314

Diseases Hereditary 315

Docking 317

Diuretics 319

Fever 322

Farcy 323

Firing 324

Glanders 325

LETTER XVIII. *continued.*

Page
Grease 328
Humours 330
Inflammation, general and local 331
Foot Lameness 339
Lampas 427
Legs big 429
Molten Grease 432
Nerving 432
Physic 435
Ringbone 440
Roaring 441
Rowels 450
Teeth 451
Salt 455
Sandcrack 456
Spavins 457
Splents 459
Staked Horses 460
Strangles 461
Stringhalt 463
Sinews 464
Sore Backs 466
Stables 467
Thick Wind 479
Thorns in Legs, and Stubs 484
Thorough-pin 486
Windgalls 486
Worms 487
Yellows 488

INTRODUCTION.

"Doubtless God might create a better berry than the strawberry, but doubtless God never did."

DR. BOTELER *(a Physician of old)*.

THE following remarks on the choice of Horses, their management, and condition, are founded on the experience of upwards of twenty years, some part of which was purchased at the price at which that commodity is generally sold; and although I am aware that we have not much to learn from the "old ones" on this subject, yet it may amuse some of my readers to see how far their ideas and our own accord; as also to shew in what esteem and honour the Horse was held by them.

THE object of Dr. Paley's Natural Theology is to infer intention and design from the general mechanism and evidences of art apparent in the animal frame; and certainly divine wisdom is in nothing more conspicuous than in the infinite variety of living creatures of different constructions---every part of them being formed with stupendous skill, and fitted with the utmost nicety to the purposes

for which they appear to have been intended. The relative adaptation of their parts to their specific purposes is one of the strongest evidences of design in Him who made them; and in no instance is this more clearly and positively demonstrated than in the animal of which I am about to treat. The description of THE HORSE has been deemed a subject not unworthy of the best and ablest writers of antiquity; nor indeed has it been considered beneath the notice of inspiration itself: for grand and sublime as have been the allusions to him by ancient and modern authors, they all fall short of, and are lost in, the majestic language applied to him by Job (ch. xxxix): "He paweth in the valley, and rejoiceth in his strength: the glory of his nostrils is terrible. He swalloweth the ground with fierceness and rage, neither believeth he (for joy) that it is the sound of the trumpet." The horse has also given birth to many beautiful similies. Juvenal compares a degenerate person of quality to a broken down race-horse; and Tibullus elegantly introduces an old worn-out racer to shew the transition of all human glory. The tongue of an empty-pated fellow has been humorously compared to a race-horse, as going faster for the less weight it carries.

As to Homer and Virgil, they put even a poet's license to the stretch when they touch on this subject. Each of them makes his horses of heavenly extraction; and the former takes as much pains to trace the pedigrees of his horses as he does those of his heroes. Twice he compliments Greece on the beauty of her women, and her *horses;* and makes those of Achilles immortal, after having stood still

and wept for the death of his friend Patroclus. In his description of the coach-horses of Diomed, he descends even to their clothing in the stable; which seems to have been ornamented in a manner suitable to the tinsel and tawdry taste of an Asiatic Prince. Neither has Virgil been behind-hand with him here; for, with a true Homeric spirit, he tells us that the horses which Cæsar consecrated when he passed the Rubicon wept, and refused their food on the day of their master's death. Of Virgil, however, it may be justly observed, that he gave to the world what, in his day, must have been considered most useful information respecting this noble animal; and whenever he has an opportunity of introducing him in his poem, he descends to the minutest particulars as to colour, shape, furniture, &c. and dwells upon him in a manner that plainly shews the particular esteem in which he held him.

It is difficult to determine the nature of animal life, but it is evident that it cannot exist without certain organised parts; and in proportion as this organisation is complete, is the vigour it possesses. When we compare the different species of animals we find each of them possessed of powers and faculties peculiar to themselves, and well adapted to the peculiar sphere of action allotted to them. Mere strength requires solidity alone; but when, as in the horse, it is united with that suppleness and activity which we see them possess, what a multitude of combining powers must it not require! What levers, springs, &c. must be called into play; and how small a space do they occupy, at the same time

allowing full liberty of action! Look at the fetlocks of a horse, how small they are! and yet we find them capable of lifting a great weight in addition to his own, to the height of five, six, or even seven feet* from the ground, and supporting it again in its descent with vastly increased force.

All bodies, animate or inanimate, derive their beauty, more or less, from their aptitude to the uses for which they were intended; though among the former some may be said to derive it from circumstances independent of this aptitude. Birds, for instance, appear conscious and proud of their ornamental plumes, and take no small pains to clean and preserve them. What enamel, however, can be much finer than the lustre of some horses' skins? In the latter---the inanimate world---variety, regularity, and just proportions of their different parts, constitute their principal beauty; for what would become of the wreathed and fluted column under a pile disproportionate to its strength? If, therefore, symmetry and proportion are necessary to form a perfect figure, where are they more frequently met with than in the horse? That elegance of form in which there is no unnecessary weight to oppress the muscles, is particularly conspicuous in the better sorts of our English horses, when brought into condition for hunting or racing. The regularity and just proportion of their limbs confer a peculiar grace and beauty on the body to which

* It is wonderful what a bound or spring some horses have the power of exerting. In 1821 Mr. Mytton's horse, "the Hero," cleared *timber* seven feet in height, with a very short run to it, in Mr. Jellico's grounds in Shropshire, with Mr. M. on his back.

they belong; and when we consider the good qualities they possess---the fire and spirit of their temperament, yet general docility---the agility of their movements, which we call action---their courage, their accomplishments, passive forbearance---and, above all, their indispensable utility---we cannot be surprised, that in all ages and in all countries they have been objects of admiration and gratitude. If, therefore, the logic of Socrates be admitted, that what is good is beautiful, and that fitness is essential to beauty---the horse must "bear the bell" among the animal creation. Exclusively of his beauty, if he be not the strongest, he is the bravest and fleetest in the forest; and if custom had not dignified the lion with the title of "king of the beasts," reason would have bestowed it on the horse.

To some animals Providence has imparted strength, to others subtlety; some are made dreadful by their ferocity---perhaps, in the first instance, by way of warning mankind from a state of indifference which too great a security might produce: but in the horse is implanted this happy combination of qualities, which render him so particularly subservient to the purposes and uses of man. Were his nature, with his gigantic strength, different to what it is, it would be impossible to tame him; for education never alters nature. Fortunately, however, it is no less true than extraordinary, that animals which are most timid are hardest to be tamed; whereas those which, like the horse, are of a bold and generous disposition---having less fear because they have less suspicion---rather solicit than avoid the kind offices of man

Frenchmen, generally speaking, are bad judges of animal life: but let us hear what one of them says on this subject*. "Of all animals the horse has the finest turn of shape, is the most noble in his inclinations, the most liberal of his services, and the most frugal of his food. He would sooner die under the weight of his labours than decline them. Is he to bear his master himself, he seems sensible of the honour. He studies how to please him; and, at the least signal, varies his pace: is always ready to slacken or redouble, or precipitate it, when he is acquainted with his master's will. Neither the length of the journey, nor the uneasiness of the way, nor ditches, nor rivers the most rapid, can discourage him. He springs through every obstacle, and is a bird whose career no impediment can check." Thus far the Frenchman goes on very well, and has described the sort of horse for which a Melton man would have no hesitation in giving five hundred guineas; but when he comes to a more minute description of his form, he produces one which is only fit to carry a Frenchman. He says, "he should have a small head, be high and thin chested, of a well-turned shape, with a belly somewhat round and tight, and thin legged. This," he adds, "is the most proper for services of a genteel nature, will do honour to his rider in performing feats of chivalry, will excel in the chase or course, and will be serviceable in travelling, or in pursuit of the enemy." He finishes by saying that the most valuable saddle horse is

* *Spectacle de la Nature.*

the English gelding, the Spanish genet, or the Arab.

That able zoologist, the late Mr. Pennant, very justly observes, that the horse is found in England of many mingled breeds, whilst most other countries produce only one. Our race-horses, he adds, descend from Arabian stallions, and the genealogy faintly extends to our hunters. The strength and courage of our draught horses are derived from those of Germany, Flanders, and Holstein. The British cavalry was remarkable even in the time of Julius Cæsar, yet we know not what was the primitive breed.

Fabulists have accounted for the original birth of the horse in two ways: first, that Neptune created him by a stroke of the earth with his trident; and, secondly, that he was begotten of the wind. These are grand and poetical ideas: but what Neptune had to do with horses, unless it were with the *hippocampi*, or sea-horses, I am at a loss to imagine: and although it appears he took one of his names from his skill in breaking them, yet I never hear of the relation between them but I think of the Irishman and his *horse marines*. Fabulists, painters, and poets, however, do not stop here; and although Noah is said to have refused a passage in the ark to the mule, *they* are not satisfied till they surpass nature, and attempt to unite in one figure what she has wisely divided between two. By destroying nature, they substitute infirmities; and, however beautiful their centaur, their Pegasus, their satyr, their dolphin, or their mermaid, may appear in a picture or a poem, they

would cut a sorry figure were they realized: and I have always been of opinion, that a brawny young fellow, stark naked, with a huge pair of wings on his back, might (*tali* auxilio) just as soon be taken for a devil as an angel. In this manner they have deformed and dishonored both man and horse, by creating a *centaur;* and, strange to say, many grave writers contend for the actual existence of the monster. Plutarch mentions one as having been seen at Corinth; and Pliny, who ought to have known better, says *he himself saw* one embalmed in honey, which had been brought from Egypt to Rome by the Emperor Claudius. This, however, is not the last upon record; for St. Jerome mentions, in the life of Paul the Hermit, that a centaur had been seen by St. Anthony. Now, as one good father could not, with propriety, doubt the veracity of another good father, it seems he only doubted the eye-sight of the Saint, and suspected the object to have been an illusion of the devil. I think we may fairly conclude that these monsters never existed but in the imagination of a madman, or a poet, or of some outlandish Greek who first saw a man upon a horse's back, which is not altogether an unnatural conclusion. Few stories, however, are more famous in historical fable than the battle of the centaurs with the Lapithæ, when they all got drunk at a wedding.

Authors are divided as to the time when men first mounted horses; but from passages in the Bible, it appears that we are indebted to Egypt for the equestrian art. That it was cultivated in Homer's time is certain; and it seems the Greeks

transmitted it to the Romans, who soon excelled their masters. Herodotus, in Thalia, speaks of hunting on horses in the time of Darius: also, in Melpomene, that the Amazons hunted on horseback with their husbands. Xenophon tells us Cyrus did so when he exercised himself and his horses. Ovid speaks of Castor and Pollux being mounted on horses whiter than snow at the hunting of the Calydonian boar. It does not, however, appear that horses were brought into Greece long before the Trojan war.

Several countries have claimed the honour of being famous for their breed of horses; but Tartary seems to be the indigenous one. They were great breeders also in Argolis, Cappadocia, and in Macedonia. In the latter country, there were kept in the Royal stud three hundred stallions and thirty thousand mares; but Epirus, formerly a kingdom of Greece, seems to have been the *Yorkshire* of the East. According to all that has been said on the subject, great attention was paid to preserve the breeds pure. In Tartary, a bad race-horse was immediately castrated; and among the Arabians, the certificate of leap and produce was delivered with all the forms and accuracy of a title-deed to an estate. They had three classes of horses in Arabia: first, noble; next, nearly so; and the third, common. These answer to our thoroughbred, half-bred, and cart-horse. To obtain possession of the first class has always been very difficult; and many interesting anecdotes are upon record of those whose necessities have compelled them to part with them.

After what has been said, supposing it to be true, we cannot wonder at the high honours that have in all ages been paid to the horse, and that he has made so conspicuous a figure in the history of every country. Darius was chosen King of Persia by the neighing of his horse, and it has been gravely asserted that Alexander would never have pushed his conquests half so far as he did, had not Bucephalus stooped to take him on his back. The history of this horse is elegantly blended with that of his master. It appears that when brought for Philip to purchase, he was extremely restive, but was soon made to submit to the courage and superior horsemanship of his son. This so pleased the father, that, kissing him, he exclaimed, "Oh, my son, seek some kingdom equal to thy worth, for Macedonia is too little for thee." We are farther told that he built a city in honour of the horse, and called it after him. If history is to be credited, one Roman Emperor raised his horse to the Consulate, and another made him a guest at table, where he was fed with gilt oats out of an ivory manger: his stable was of marble, his collar set with pearls, and his clothing of rich purple, fit for a Bishop. In Morocco, horses were made saints*, and when the King went abroad, he caused one of them to be led before him richly accoutred, and his tail held up by a Christian. Oriental Princes always sent a horse as a present to their favorites. When Trajan stayed at Antioch, several petty Princes sent him presents---among which was a horse, that, when brought before him, kneeled and bowed to him.

* "The World."

It is told of Cyrus, that having had one of his famous grey horses drowned in passing a large river in Asia, he was so vexed that he stopped the course of it, and divided it into three hundred and sixty channels. So attached was this great Prince to horses and horsemanship, that among his subjects it was considered a disgrace to be seen publicly on foot. Among the ancient Grecians, horsemen were placed above the commonalty, and next to those of the highest rank and fortune. The same respect was also paid to the Roman *Equites;* and in the present day a sub in a dragoon regiment thinks himself equal to a captain of foot.

No trifling respect, if not honour, is paid to the horses of our own country. They exceed all other animals at least tenfold in their value; and their comfort and convenience are, generally speaking strictly attended to. William the Conqueror improved the breed of English horses, as did the Earl of Shrewsbury in his (William's) time. In Edward the Sixth's reign an Act was passed to make stealing a horse felony without benefit of clergy, but it did not extend to other cattle; and in that of Harry the Eighth, all persons whose grounds were inclosed were obliged to keep two brood mares of a certain size.

We are now arrived at such perfection in the breeding and *forcing* of horses, if I may be allowed such an expression, that we have nothing to learn from those who have gone before us: but the *principles* laid down by ancient writers on this subject, particularly by Virgil and Pliny, both good

judges, are strictly correct. The former says, if you want to win a prize at the Olympic games, *consult the dam of your colt*. This was exactly the opinion of the late Lord Grosvenor, the greatest breeder of race-horses this country ever saw. The present Earl has confirmed it by breeding very extensively from Thunderbolt, but it has been only out of two or three of his best mares that he could get a winner. This has also been very strongly exemplified at the last Newmarket meetings by the produce of the Duke of Grafton's famous mares winning all before them*.

It is much to be lamented that among sportsmen the prejudice against mares is so strong, as, in consequence, the value of many good hunters, and, subsequently, many good brood mares, is never known; for being so generally rejected by those persons who would give them the fairest chance of distinguishing themselves, they fall into the hands of farmers and others, who cannot for obvious reasons give them that opportunity. If we look back to the great performances on the road against time, we shall find that by far the greater number of them were by mares; and *Eleanor*† winning *the Derby*

* The produce of Coquette, Diana, Piquet, Miltonia, Parasol, Medora, Prudence, and Penelope, won (thirty times), in 1822, prizes amounting to 11,317*l*.

† This excellent mare when in training had forty-nine engagements, and was the winner of twenty-eight prizes: she was the successful competitor for both the Derby and Oaks at Epsom; she also won the King's Plates at Newmarket and Lincoln; the Gold Cups at Oxford, Newmarket, and Egham; and 2567*l*. 5*s*. in specie. Eleanor was dam of *Nell* by Johnny, *Muley* by Orville, *Troilus* by Walton, *Active* by Partisan, *My Aunt Nan* by Pioneer, &c. &c.

and the Oaks (in 1801), and the running of Lord Grosvenor's *Meteora**, were perhaps never excelled if equalled by horses. The Arabians have always preferred mares to horses. They have been found to endure hunger and thirst, and all other privations, better; and although in our climate horses are seldom put to the test in this respect, yet, when travelling between the tropics in a desert, it must be a most valuable consideration. In a race, it is true, mares are put upon a par with geldings; but it must be admitted that they are more perfect in their nature, and, with the exception of the period of genial desire, I conceive them to be more than equal to them in any kind of exertion on the road or in the field.

By the Spanish proverb, "He that will have a mule without a fault must keep none." Perfection is seldom found in any living being; but certain it is, that of all animals in which perfection, or as near to it as their nature will admit, is required, it is in a horse to carry a man or a woman on the road: and were I requested by a friend to purchase a good hack for him, I should consider him to have given me a commission ten times more difficult than if he had requested me to purchase half a dozen hunters; and for the following reasons:—In the first place, the price offered for a hack is seldom sufficiently great to induce the

* Meteora's career was truly brilliant. In addition to 1480l. she won the Oaks at Epsom, the Royal Plate at Chelmsford, two Classes of the Oatlands, the Audley End Stakes, twice One-third of 25gs. Subscription, the Jockey Club Plate, two Cups at Stamford, the Somerset Stakes, and the Cup at Brighton. She died in 1821.

owner to part with him if he is really a good one; and to be a good one, he must not only be a *hunter in miniature*, but he must be possessed of many good qualities that may be dispensed with in a hunter. A horse may have twisted fore legs, fleshy feet, thrushes, or corns; may be startlish, fretful, and awkward in his slow paces, and yet be a brilliant hunter over a country*. But the qualifications of a good hack are so numerous as to be almost disheartening to look for them: he must have good fore legs as well as good hinder ones: he must have perfect feet, a good mouth, not given to start, safe on his legs, gentle in his temper, and quiet to ride *on all occasions*. A fidgetty hack, however good in his nature, is very unpleasant, and in hot weather insupportable. He is fit for nothing but to ride to covert at the rate of twenty miles in the hour; and in that case his being a little eager to get on may be immaterial, as the disease and the remedy travel together. I remember asking a young Oxonian whether his hack was a good one, and his answer was, "Capital! he ran away with me every yard of the road (fourteen miles) to covert this morning." For such quick work, however, it is necessary that a hack should be well bred. A low-bred one will go very pleasantly at this rate for about ten miles, when he will begin to roll

* What I have now asserted was completely verified by that celebrated horse *The Clipper*. His fore-legs were so twisted that he was generally booted to go to covert, and his temper so awkward that it was necessary that some one should accompany the boy who rode him to open the gates. It is almost unnecessary to add that he was the property of Mr. Lindo, and perhaps the most brilliant hunter that ever appeared in Leicestershire.

about and become unsafe. In the language of grooms, he will "cry out for his mamma." There are very few exceptions to this rule, for nature seldom goes out of her course to oblige any man.

There is one most essential quality, a *sine qua non* in a good hack, which is, that he should go *near the ground*, and yet go safe. Perhaps it may not be generally known that a horse may go *very near the ground*, and never make a trip; and that another may lift his knee up almost to his nose, and yet be an arrant tumble-down. Were I to say which was the safest animal in all its paces that ever came under my observation, I should have no hesitation in saying it was a mare that was in my own family for upwards of fifteen years, that touched every stone which she passed her foot over, but never made a mistake in all that time. Lifting up the leg, or what the London people call the "knee-up action," has nothing to do with a horse going safe on the road. It is not on the *taking up* of the foot, but on the *putting of it down*, that the safety of a horse's action depends. Although I do not go so far as to say (though it has been said) that the fore-legs are merely pillars under the body of a horse, and have little to do with his action, yet I do maintain that they are entirely obedient to the shoulder; and if the shoulder command that the toe shall touch the ground first, instead of the foot coming down flat, with the heel well down, it is no matter how high the foot is taken up by the bending of the knee. What I have said may appear rather paradoxical; but a little consideration will establish the justness of my observation.

When the leg is bent, as in action, in the form of a C, and the foot suspended in the air, turning inwards, with a curve towards the body, were it in that state to come in contact with a stone or any other substance, it would pass it over without resistance ---being, as it were, at that time in a flaccid state; but when the foot approaches the ground, the limb is extended, and the whole weight of the fore quarters is about to be thrown upon it. If, then, the base for that weight be not even and firm---if the toe dig into the ground before the bearing is completed, a trip, and a dangerous one, is the consequence. My argument is exemplified thus. Man walks very near to the ground, but seldom strikes it with his toe. Follow him over a path where the snow is deep enough to trace him, and you will immediately perceive that he strikes the snow with his heel, but scarcely ever with his toe. If he did, he would constantly be injuring himself, and would soon become a cripple. The action of a man proceeds from his hips; whereas that of a horse, as far as his fore legs are concerned, is from his shoulders; but the principle is the same with each: each is a piece of curiously-wrought mechanism; and according to the correctness of that mechanism is their action true.

When I try a horse with the view of purchasing him for a hack, my trial is a very short one. I get on his back, and, loosing his head, let him walk a hundred yards on a foot-path. If nature has designed him to stick his toe into the ground instead of putting his foot down quite flat, by which alone he can go safe, he will do so two or three

times before he goes that distance. There are little undulations in a road of that description which are scarcely perceptible, and for that reason will immediately detect this sort of action. If, on the other hand, he walk smoothly over it without touching it, I try his other paces, and if I like them I have no reason to fear his tumbling down. There are other ways in which horses fall down on the road. One is by sudden starting, when their legs "fly from under them," as it is termed; and another by what is called "a false step," that is, by placing the foot on a stone that rolls from under it; or from the giving way of any substance on which they may tread; also from the corns or thrushes, in which case they come down to the ground more suddenly, and with greater violence than when the fall is occasioned by a stumble. Falls, however, of this nature generally proceed from want of energy in their action, and a good use of their hinder legs; but as circumstances of this nature will occur on all roads, it shews the necessity of never trusting a hack entirely to himself. With the exception of post-boys and commercial travellers, few persons have ridden the road more than I have done; and I attribute the trifling number of falls I have had to never trusting my horse. I have always made it a rule to feel his mouth lightly, and generally more with the bradoon than with the curb, and for the following reasons: In the first place, to go safe on the road, a horse must carry his head where nature intended he should carry it, and by riding him on the bradoon he will be the more inclined to do so. Secondly, by always feeling his mouth, however lightly, you

are enabled to give him assistance *immediately* on his legs failing him, when a very little will be sufficient to restore the equilibrium: but if you ride him on the curb, with a loose rein, he may be nearly down before you feel him; and when the centre of gravity is lost it is not so easily restored. Feeling a horse's mouth in this way is a still greater security from falls proceeding from any of the last mentioned causes, as so little previous warning is generally given. A few years since I was riding to covert with a master of fox-hounds who rode heavy, and seeing him going along at the rate of twelve miles in the hour, up and down hill, with his reins on his horse's neck, I observed to him that I should be afraid to trust him. His answer was, that "he could not fall." The very next time he rode him, however, he did fall, rolling completely over him; and, had it not been that the ground was soft, must in all probability have killed or seriously hurt him. However pleasant and wholesome horse-exercise is, it has been remarked that no man who gets on a horse knows how or when he shall get off him; and certain it is, that when, under any circumstances, we trust our safety to another, the insurance becomes doubly hazardous. Common precautions therefore are neither to be despised nor neglected. A leg, a thigh, or a skull is soon fractured; and a a really good and safe hack is not only, as I before mentioned, the most scarce and difficult horse to be met with, but invaluable to a man who rides much on the road, particularly after a certain time of life has gone by.

Although it is not necessary, or to be expected,

that a hack should be a hunter, yet a hunter, to be perfect, should be a good back, and his value is much increased by his being so. I remember hearing a person speaking of a hunter, by a covert's side in Leicestershire, which was for sale; and, among other good qualities, he mentioned that he was a nice horse to carry a woman on the road. "Whose horse is that?" exclaimed my Lord Maynard, who was within hearing. "I will give two hundred guineas for him; for a horse that will carry a woman well will always carry a man." The chief paces for a hack to carry a gentleman are the walk and the canter. A very quick trot is a most ungentlemanlike pace, and only fit for a butcher; besides which it wears out a horse much sooner than a canter, from the weight being all thrown upon one fore leg at the same time; whereas, in the canter, it is equally divided between both. Added to this, a canter is much more easy, as well as safer to the rider, the horse having his haunches more under him than when he trots, thereby more likely to recover himself in case of making a mistake, which the best is sometimes subject to. Fast trotting also distresses a horse more than cantering, because in the one he is going up to the top of his speed, and in the other much below it. Trotting, however, has been more in vogue lately in the sporting world; and the match between Mr. Barnard's mare, of the Arabian breed, and Captain Coltson's horse, for 500gs. was a wonderful performance. It appears that the mare, who won, did the last mile within six seconds of the rate of twenty miles in the hour without being pushed---the

speed of the horse having fallen off. Had the race been continued for one other mile at the pace the mare did the last, *she would have trotted ten miles in the extraordinary short space of half an hour and fifty-two seconds**.

Some cantering horses appear to consult the ease and comfort of their riders by never breaking into a trot until pulled up for that purpose; and I have met with a *few* in my time that did not *appear* to be going more than eight or nine miles in the hour, and yet were going eleven. This is the perfection of action in a hack; and I never see one getting over the ground in this delightful and smooth manner, but it brings to my recollection the anecdote of a gentleman who sent for his huntsman into his dining-room to inquire after the sport of the day; when, after describing the country he had drawn over, and the run he had had, he finished by saying that "*his hounds went like hell and d——n, and the old mare carried him like oil!*"

Demosthenes being asked what was the first point in oratory? replied—action. What the second?—action. What the third?—action. Had the sage Grecian been catechised in this way as to his opinion of a horse, he could not, with all his eloquence, have expressed himself more aptly; for action is everything: without it the finest form is of no avail; although in justice we must admit

* This event took place on Tuesday, June 4th, 1822, in the Grove Park, near Gerrard's Cross, Bucks, over a two-mile circle. It was to trot nine miles against each other, and to start at different ends of the two miles. It was as fine a race as ever was run, and both were neck and neck at the seventh mile, when the horse began to fall a little off his speed.

that we do not often find very fine shape and make unaccompanied by it. Sometimes, however, there is an helplessness and want of energy about a well-shaped horse which we cannot account for---arising, perhaps, from some physical cause not apparent to the eye. I have frequently been asked my opinion of a horse when standing in the stable. My answer has invariably been, "Let me get upon his back, and I will tell you." A judge, however, may form some idea of what a horse is before he mounts him, from the position of those two most essential points ---the shoulders, and the hinder legs; for if they are not in their proper places, it is in vain to look for true action. You may as well expect an ass to play the fiddle, as a horse to carry his rider pleasantly, unless he have good lengthy shoulders and well-bent hinder legs. A friend of mine, who is become fastidious in his judgment, goes so far as to say that no horse can have a good mouth with straight hinder legs. He is so far correct, inasmuch as no horse with straight hinder legs can pull together; therefore neither his head nor his heels can be where they ought to be; and consequently he can never be fit to carry a gentleman.

LETTER I.

CONDITION OF HUNTERS.

HAD some sensible and rational groom given to the world the result of his practice in the stable, I should not have taken up my pen on this humble subject, conceiving he would have been better qualified for the task. But as no instructions of this nature are before us, and they appear to be much wanting, I will endeavour to furnish them to the best of my ability. It is not from veterinary surgeons, or from books on farriery, that this information is to be derived. Mr. White's is the only one on this subject that I ever was possessed of. It appears to be written by a man who understands his profession, and his practice is rational and safe. He has a long chapter on *condition;* but he writes as a veterinary surgeon, treating scientifically of the anatomy and pathology of the horse, and stating such defects as operate *against* getting a horse into condition---as also recommending some preventives of disease after hunting, &c. But for directions as to work, feeding, and other means by which we are to get a horse fit to appear by a covert-side, we look in vain. Mr. White, however, as I before observed, is a veterinary surgeon; and it is not, generally

speaking, from veterinary surgeons that we are to expect such directions. Their attention is turned to more important subjects; and it is from those alone who have made it either the business or amusement *(labor ipse voluntas)* of their lives to superintend the management of hunters, that we are to receive practical and useful directions. Among the latter I may class myself. For twenty years of my life I have had a stud of hunters; and although I have had two as good grooms as fall to the lot of most men, I never gave them controul over my horses in the stable; but acted on the principle that two heads may be better than one, and that the person who rides the horse is a better judge of his state than the person who cleans him.

I shall endeavour, therefore, to detail the result of my own practical observations on this most essential point---a point on which depends not only the place which every man who rides to hounds is to maintain in the field, but his safety in that place; and---what is of no small importance, from the high prices at which horses have lately been sold---the safety of his horse afterwards.

In illustration of argument, or in corroboration of facts, it is impossible to avoid sometimes talking of oneself, particularly on such a subject as this: but I beg the reader to understand that it is my wish to suggest, rather than dictate. I shall, therefore, merely describe that method of treating the hunter, in his preparation for the field, which I have found to be the most safe and advantageous---leaving others to judge of its propriety, and to adhere to their own plans, if they prefer them to mine. The

situation of a hunter, well ridden up to hounds, is one of great peril and danger; and it may be some recommendation to the plan I have pursued, that in a long series of years I have never had the distemper in my stable, nor more than one dead horse dragged out of it. I may also add that I have had more than my share of success with my horses.

Mr. Locke was of opinion that such is the diversity of the tastes and relishes of men, that it would be difficult to write a book which might not please some; and one of the "old ones" has observed, that every man should do *something* to make himself useful and profitable to mankind If, then, by communicating the result of my experience on this subject, I may amuse some, and be the means of enabling others who pursue the diversion of fox-hunting, to do justice to the physical powers of their horses, and thereby diminish their sufferings (for suffer they must), from the work which they are put to perform, I shall not think my time has been mis-employed. It is a subject on which theory is worth little. The information required must be the result of practice or close observation alone. Be it remembered, that it was at the suggestion of a cobbler that the Grecian painter altered the shoe of his figure. If I differ from some old-established rules, it will be on the principle that no notions, however handed down to us, which our reason cannot approve, should influence our judgment in matters of this nature, but we should be solely guided by what appears rational and true; and "he who will not reason is a bigot, and he who cannot is a fool." Ignorance and prejudice are

fading fast, and common sense finds its way into the stable, as well as into other departments of general economy, and knowledge predominates over ignorance and error, as man governs other animals.

The word "condition" is one of the widest latitude. Dr. Johnson defines it thus:—"a quality by which anything is denominated good or bad." Strictly speaking, therefore, the adjective 'good,' or 'bad,' is wanting to give it its proper signification. It has, however, been generally applied in a favorable light. Our old writers were wont to call men of rank and fortune "gentlemen of condition;" and in our own times, if we see a horse, or a piece of land, looking well, we are apt to say "they are in condition." As, however, by the word condition, when applied to the horse, we mean a state quite contrary to a state of nature, it follows that *art* is necessary to produce it; and as all measures which tend to throw nature out of her destined course *by violence* are bad, it also follows that time, great caution, and judgment are necessary in the use of them; for which reasons it is not in the power of every man calling himself a groom to get a horse into condition. In the first place, it requires a larger stock of strength of mind than persons of this description are generally possessed of, to induce them to lay aside old prejudices and customs; and, what is a still harder task, to acknowledge that they know nothing. That there are scientific grooms it is true; men capable of getting a stud of horses into perfect condition without the master's eye; but it is not in the power of every man who keeps his hunters to get them. They are

scarce; and their demands for wages, and other concomitant expenses, are not within the reach of us all.

In the common language of the stable, a horse is said to be "in condition" when he is full of flesh, has a shining coat, and a healthy look; whereas, with all these outward appearances, being in perfect health, he may be quite incapable of exerting his physical powers with effect: for although, in some measure, the skin may be said to be the complexion of a horse, yet it is more by the *feel* than by his look that his good or bad condition is to be appreciated.

It is well known that animals in a state of domestication exhibit powers unknown in their wild and natural state; and so does man. With respect to the latter, it has been ascertained by the hynanometer, or measure of strength, of Regnier, that the physical powers of man in a savage state are only as 51 to 69 of that of a Frenchman, and 71 of that of an Englishman. Good food, aided by exercise, invigorates the muscles by consolidating the flesh; and the texture of the body depends, in great measure, on the food on which all animals live.

Next to the nature and accomplishments of a hunter, his condition is of the first importance. In my own opinion it has always been considered of such *paramount necessity*, that I have thought no pains or expense ill bestowed to obtain it; having so often proved that a middling horse in condition will beat a good one not fit to go. The system which I have adopted for upwards of twenty years is now becoming more general; but when I first

commenced it, it was quite contrary to that pursued by my friends and neighbours; and particularly obnoxious to my groom, who told me my horses would be ruined---that every feed of corn they ate in the summer was thrown away upon them---that their legs would be spoiled---their feet contracted; and that they would be blind, broken-winded, &c. The system I allude to is, *never to give a hunter what is called "a summer's run at grass," and, except under particular and very favorable circumstances, never to turn him out at all.*

When the utility of any generally adopted practice becomes doubtful, it is entitled to a fair discussion; but before we condemn it we should be certain that it is wrong; and when a man takes upon himself to contradict received opinions, and prejudices sanctioned by time, he should bring valid proof of what he asserts. He should set aside the authority of others, and use his own reason. He should refer to his own experience, which is the surest test of truth. When, however, a gentleman undertakes to interfere with his groom in the management of his stable, he has no trifling difficulties to contend with. The pride of science is humble when compared with the pride of ignorance; and ignorance and presumption accompany each other. He must, therefore, be prepared for a contest; but he has the staff in his own hand, and he is wrong if he yields it to another.

I am now called upon to state why I consider the practice of turning out hunters to what is called "a summer's run at grass," to be injurious to them, and why I prefer my own plan of never turning

them out at all, except, as I before observed, under particular and favorable circumstances.

As I was not in the world fifty years ago, I cannot tell what hunting was in those days; but I have often conversed with those who have seen, and described it; and I should conceive that the Revolution of the French empire could not have been more complete than has been that of fox-hunting within the period alluded to. The style of the hound, the horse, and the man* who rides him, have all undergone a change in the regular march of time; and fox-hunting has not been excluded from that blaze of new light that has dawned on our present age. Whither this light will extend, or what it will set fire to, is not for me to trouble myself about here. It is enough for me to observe, that whenever improvement finds its way into one part of an establishment, it must be accompanied by improvement in others, or the benefit of it is lost; and if the fox† and the hounds go faster in 1822 than they did in 1772, the horse that follows

* A modern fox-hunter, stepping out of his carriage by a covert side, looks more like as though he were going a-courting than fox-hunting. Those of the Old School thought this was carried too far. The late Mr. Forrester, of Willy Hall, in Shropshire, who hunted that country many years, gave his coverts, when far advanced in life, to a pack of fox-hounds set up in his neighbourhood by some farmers. Having ridden out one day to see them, he was asked how he liked them? "Very much indeed," replied the veteran: "there was not one d—d fellow in a white-topped boot among them."

† A fox found by the drag, as was the custom in former days, as soon as it was light, and before he had digested his chicken, could not be supposed to run so fast as one whipped out of an acre of gorse at one o'clock in the afternoon, as is the fashionable time at present.

them must go faster also. When I began to look at fox-hounds, on a pony, in the Christmas holidays, they appeared to me to be a different kind of animal to those which I have seen since. Comparatively speaking, harriers now go the pace of fox-hounds in those times, and fox-hounds that of grey-hounds. The style of horse, the seat upon him, have all been revolutionized, and fox-hunting in some countries must soon change its name to "*racing after a fox*." When a celebrated hard rider comes to confess that he was beaten two miles in twenty-two minutes, with a good horse and a good start, which I was witness to with the Duke of Rutland's hounds, what can be the difference between going over Leicestershire on a hunter after a fox, or going over the Beacon at Newmarket on a race-horse? The pace, when going, must be nearly the same; and the only thing that can enable the hunter to continue it, is the relief he gets by being pulled up at his fences. If, therefore, the pace of a hunter---and it is the pace that kills---is anything like the pace of the race-horse, the preparation for that pace should be in some measure similar, or we must admit that he has not fair play.

There is an expression at the beginning of this paper which is entitled to particular consideration. I say, that "all measures which tend to throw nature out of her destined course *by violence* are bad (*p.* 26)." Now we must be aware that nature never intended that a horse should eat a peck or six quarterns of corn in a day, besides beans or peas; be kept in an under oxygenated atmosphere,

instead of the pure air; be clothed, sweated, and cleaned---to say nothing of the work he is called upon to perform. If then his nature is, as it were, to be thus changed, how can we expect that it can be done but by slow degrees? "Use," says the old proverb, "is second nature;" but the word use implies custom, and custom is not established but by length of time. How, then, can we reasonably expect that a horse turned out to grass for the summer, and taken up, full of bad flesh, the first week in August (which is about the time those who are in the habit of turning out their hunters generally take them up), should be in condition, and fit to go to hounds by the end of October, or the beginning of November? As I have before observed, we think ourselves lucky if we can bring a race-horse to the post, fit to run, in eight or twelve months; but a hunter is to be made fit to follow hounds in as many weeks! Nature, however, let me repeat, will not be put out of her course by violence, and time alone will admit of the change we wish to produce. Training-grooms are well aware of this; and those who entrust their horses to them have too often occasion to repent of not having sent them sooner to their stables, to prevent their being hurried with their work and condition. If, then, time is so necessary in the hands of a training-groom with a horse which is sure to have been in a certain degree of work, and preparation, previous to his arriving under his care, what chance can a hunter have to be in condition in November when he is taken out of a rich pasture in August? Ask a training-groom to look at a hunter that *is fit to go*,

and observe what he says. He will first feel his crest, and then laying his hand flat on his ribs, he will tell you if he likes him. "This horse is well: his flesh feels as if it had been taken off, and well put on again." Now, as before a horse can be in condition his bad flesh must come off him, as certain as the horn at the top of his foot must find its way to the bottom of it, think what time it must take to accomplish this change, if it is to be accomplished, without injury? In proof of what I assert, look at *all* persons' hunters in the month of March. They are *then in condition*, just as there is no further occasion for it, and with most of them it is all going to be destroyed by four months' run at grass. Observe to a friend at the beginning of the season, whose horse has been at grass in the summer, that he is not looking well, but is sweating, and all in a lather as he trots along, and he will tell you "it is the month of November---a month so bad for horses; but in a short time he will look as well as any man's horse." What an excuse would this be for Mr. Prince or Mr. Robson, should they bring a race-horse to the post out of condition at the Houghton Meeting in November! A horse, if he is a sound one, is to be got into condition by any given period of the year, if time be allowed to do it as it should be done.

A friend of mine, who has tried the powers of a horse as much as any man could do, has justly observed, that "grass is a very good preparation for a bullock for Smithfield market, but a very bad one for a hunter." As for myself, I have long been of opinion that more hunters are ruined by being

turned out to grass, than persons are generally aware of; and when I see one in blooming condition going to be turned out for the summer, I always think that it is almost even betting that he never is in condition again. When I first set out in life hunters were turned out under circumstances still more unfavorable than they are at present. They were not even physicked; but, as soon as hunting was over, their clothes were stripped off, and after being turned out for an hour or two for a few times in the middle of the day, to prepare them for the change, they were sent to take their chance---perhaps on some strong feeding land—to meet the young grass, as it was called, and there to remain until about the 12th of the succeeding August. This was done under the false impression that spring grass purges horses; whereas it has been clearly proved that if a horse goes out to grass foul, he comes up from it still more foul. The load of bad flesh he acquires in this state may be termed a sort of "oleaginous dropsy," the effect of a general atony of the absorbents, created by the immense quantity of succulent food he devours, and by the sudden stop put to the evacuations by sweating, and other means resorted to when in regular work. In later times horses have had the advantage of being cleansed by physic before they are turned out; but even this cannot prevent the evils attending the practice of giving a hunter what is called "a summer's run at grass." To say nothing of the accidents they are subject to when turned out at large---as most diseases of horses arise from plethora---their being at liberty to

gorge themselves uncontrolled is frequently productive of diseases of various kinds. Nor, indeed, can we wonder at it. Habit, or rather custom, cannot so far overcome nature as to admit of an animal being kept eight months in the year in a warm stable, and in an equal temperature, and the other four to be exposed to the noon-tide heat and midnight cold with impunity. These extremes cannot fail to produce an increased action of the arterial system. Inflammation often attacks (perhaps unperceived) those organs which are most readily influenced by local irritation; hence blindness, and what is vulgarly and stupidly called "a grass cough"---ending in broken wind, or roaring---are produced.

I have hitherto appeared to have been speaking of the evil of turning hunters out to grass, as far only as regards the state of their bodies, without a reference to that of their legs and feet, which have generally been the chief consideration with those who have pursued that plan. I have, however, no hesitation in saying that the idea of a summer's run at grass being beneficial to the legs of a hunter is a most erroneous one, and that with respect to the feet, they may, by proper management in the stable or loose house, derive all those advantages which they would receive from grass. As what I am going to say on this subject may be contrary to the generally received opinion of many, I shall be careful to assert nothing but what I have confirmed by actual experience. I have had in my stable, as all men who have kept them must have had, two hunters with their legs *equally* round,

full, and "knocked about," as we are apt to say, by a season's hard work---full of bangs, blows, and contusions of all descriptions. I have turned one of them out to grass, after being properly physicked, and I have kept the other in a loose house, also well cleansed by physic. At the end of two months I have found the legs of the horse in the loose house perfectly fine, and reduced to their natural size; and I have found those of the other, which was at grass, as round, or nearly so, as when he first went out. Let us give ourselves time to inquire into this matter, and we shall no longer wonder at the result of the experiment. If we injure one of our own limbs by a strain, a blow, or any other cause, do we continue to use it, or do we give it rest? Does a horse in training injure one of his legs by a blow or a strain, which from the nature of his work he is so liable to, does he go on with his work, even if not lame, or is he "indulged," as they call it in the stables, with two or three days' walking exercise, which they term *rest?* All this applies to the hunter. To say nothing of his galloping over the hard ground---perhaps leaping---I think I may venture to assert, that, at the most moderate calculation, he travels on an average at the rate of half a mile in the hour, or twelve miles in the course of the day and night. At this pace, if he is at grass for three months, he travels one thousand miles. Some horses, I have no doubt, exceed this distance; but the thousand miles, or say five hundred if you like, must be a bad recipe for limbs which have been injured by hard work and strains, and

whose sinews and fibres have lost much of their proper tone and vigour.

Before I proceed any further on this subject I do not wish the reader to suppose that I am averse to hunters being turned out, as I before observed, "under favorable circumstances," the nature of which I shall explain hereafter. All that I condemn is the practice of throwing a horse out of his condition by a long run at grass. I am aware that the dews of the evening may be favorable to the feet of horses; but I also contend that they can, by proper management, receive all those advantages in a loose house during the summer months. As I have set out by promising to assert nothing but what I have experienced the truth of, I shall state the case of a horse of my own which was in my stable for fifteen years, with the exception of one winter's run. He was a thorough-bred horse, and had run several times at Newmarket and other places. He had a chronic cough on him when I first became possessed of him, which affected him after his water, and when he got foul in his body. His feet, as is too often the case with thorough-bred ones, were disposed to contract. He was also a hard-feeding, gorging horse, and took ten drachms of aloes, generally aided by calomel, to stir his bowels. Now as it was not tried I cannot presume to say what would have been the result of the experiment; but I have every reason to believe that had that horse been turned out to grass for half those fifteen summers he would have been broken-winded. When I shot him, at twenty-one years old,

he was in beautiful condition; and his feet remained perfectly sound until within three months of his death, when disease attacked one of them, and I thought it too late in life to attempt to remove it.

In the case of masters of hounds, I am aware that the plan of keeping hunters up in the summer cannot be so easily accomplished, from the number of their stud; therefore servants' horses must take their chance. They are, however, generally taken up soon, and get into work by degrees, in cub hunting, which gives them an advantage; and wear-and-tear of horses of this description is to be calculated upon as a matter of course by those who keep fox-hounds. When Lord Sefton hunted Leicestershire, his own horses, that cost him six or eight hundred guineas each, were ridden about in the summer quietly, with the hounds, although they were turned out at night under favorable circumstances. It was impossible to exceed the condition these horses were in, to carry high weight.

LETTER II.

OBJECTIONS AGAINST TURNING HUNTERS OUT TO A SUMMER'S RUN AT GRASS.—PHYSIC.

My principal objections against turning hunters out to a summer's run at grass, as far as relates to their legs, consist of three. The first is, the great risk we run of injuring their legs by the work we are obliged to give them, *when heavy*, to get rid of the load of flesh which they have accumulated at grass. My eyes were opened on this subject by witnessing the progress of a stable of hunters belonging to a friend of mine, with whom I was on intimate terms. He was a heavy man, and generally had a stud of five or six hunters, which he was in the habit of turning out for a summer's run in strong feeding land. The consequence was, they came up overladen with flesh about the last week in July, or the first in August. When in the stable no man's horses were better looked after, for he was a good judge of such matters; but towards the end of September, or the beginning of October, I always found that out of these five or six horses he had two or three lame ones. On questioning him as to the cause of their lameness, I was generally told they had thrown out a bit of a splent, got a blow on their legs, or some trifling reason was assigned. It, however, too often

happened that they were either obliged to go through the process of blistering, perhaps the operation of firing, and then not fit to ride till after Christmas. I, however, soon found out that it was *the work these horses were doing, before they were fit to work---the galloping under this load of flesh---* that destroyed their legs; and the example before my eyes led me, twenty years ago, to the determination that turning out a hunter to a summer's run at grass to help himself to as much food as he pleased to eat, and accumulate this load of flesh, which was to be got rid of *only at the expense of his legs*, was a most pernicious system, and was the cause of the number of lame horses which I met with in the stables of my friends. From that period to the present I have never given a hunter a summer's run at grass, nor would I recommend any one to do it who wishes to be well carried to hounds, and to preserve his horse to a good old age. Rest from his labours, I admit, is essential to a hunter as well as to a race horse. It will not do to have him always going; or, like the race horse, he will get stale. Green meat is also necessary; at least, cooling and wholesome; but that is to be had in a loose house; and a small piece of land---a few square yards---if his owner has no paddocks, is sufficient for him to exercise himself in, and keep himself in health. If it were not so, what would become of stallions that live this kind of life for twenty years together, and do well? The influence of habit on animal economy is very strong, and soon overcomes nature.

With respect to the feet of hunters, all the

advantages obtained at grass are within our reach in the stable. I have heard and read a great deal about horn contracting in oil and expanding in water: but we want neither oil nor water. It is moisture that we require, and not wet. The latter is so far from being serviceable to the feet of horses, that it is really injurious. Let those who doubt what I say keep a horse for six months in sponge boots, and see what a state his feet will be in. We read in history that the horses in Hannibal's army were rendered useless by travelling three days successively in water. Their hoofs (for shoes they had none), we are told, came off. They would have travelled for thirty days over a sandy desert with less inconvenience. By watering a hunter three times a day in the summer at a pond, or in a running stream, and keeping his feet stopped, three times a week, with cow-dung mixed with clay, or damp (not wet) tow stuffed into them, we have all the advantages that can be obtained in this respect, by turning him out to grass. As to what we hear, or read, of the bad effects of standing on hot litter, as disposing horses' feet to contract, I do not listen to it, as my answer is---what business has a hunter to be standing on hot litter! There always is clean straw to be had, and a boy to set his bed straight, whether in a stall or in a loose house.

My second objection to turning hunters out to grass is one which escapes the observation of many; and that is, the great stress which is laid upon the sinews of the fore-legs of most hunters *when in the act of grazing*. It is well known that

the legs of horses are seldom, if ever, much longer, at any period of their lives, than they are when they are foaled, or at least at the expiration of the first year; and that the body, when at maturity, rises to the height prescribed, as it were, by the length of the legs. This, however, chiefly applies to horses which have been reared in a natural state, and not forced by corn, which most colts now are, that promise to make valuable or first-rate hunters. In this case, more than usual, or, we may venture to say, *intended* growth of the body takes place, which, whilst it adds much to their value, and produces what we so much prize---the short-legged horse of power and size---yet it makes it very difficult for such a horse to reach the ground with his mouth, his head being so far from it when erect. Indeed, he cannot do it without either half kneeling down, or greatly straining his fore-legs. I lately witnessed a striking proof of what I here assert: I saw a remarkably fine hunter in the act of filling himself with grass; and the only way in which he could get at it was by placing one fore-foot close to his hind ones, and the other close to his mouth, when it was on the ground, and even then there was a tremor in his legs which too plainly shewed the stress laid upon them to enable him to reach his food. We have all experienced this, more or less, as we have let our horses stoop to drink in shallow water.

My third and most essential objection to turning hunters out to grass is, not so much on account of their legs and feet---for without good legs and feet horses may go very well over a country---

but it is the destruction of their condition which is so detrimental to them, for it is impossible that it can be restored by the time they are required to go into the field again*.

With respect to the effect of *condition* on the horse, it is in the stable of a post-master that I take my stand. When I see a pair of under-sized, apparently worn-out, horses put to what, in the language of the road, is called "a bounder," that is, a gentleman's carriage with three in and two out---with "everything belonging to the family," as the post-boys say, "but the kitchen grate:" when I see these animals draw this load a fifteen-mile stage in the morning without difficulty, return home, and take another such a load in the evening:---when I see them, with skins as fine as race horses, stand out exposed to all weathers, washed all over when they are hot, and all this with impunity; I ask myself what enables these animals to do this? Is it their natural physical strength? Is it the goodness of their nature? My reasoning faculty tells me it is neither. They would both fail. No! it is solely to be attributed

* It so happened that whilst (July 26, 1822) in the act of writing this, the groom (as he is called) of a neighbouring gentleman called on me with a message from his master, and the following conversation passed between us:—"Has your master taken up his hunters?"—"No, Sir, he never takes them up till the first of August; but this year he has only one to take up."—"How so?"—"He has sold one, and the other died last week."—"Of what did he die?"—"Of the blood."—"What do you mean by the blood?"—"He was so terribly fat, his blood stagnated: the mare is terribly fat too."—"How shall you get it off her?"—"Oh, we sweats it off."—"How are her legs?"—"Very middling." Here the conversation ended.

to the six, eight, ten, twelve, perhaps, fourteen years' *hard meat* which they have got in them---to that consolidation of flesh, that invigoration of muscle, that stimulus to their nature, which this high keep has imparted to them---which give them, as it were, a sort of preternatural power; inasmuch as but for that stimulus they would never be able to perform more than half of what we see them do. It is true that during the progress of this preternatural state, or, what on the road is called the *seasoning*, many of them lose their eyes, get big legs, &c.; but this is chiefly owing to no preventive means being taken by their owners, who find it more to their account to let them take their chance of losing an eye, or perhaps both, than to lose their work, from physicking, &c. which cannot be done without rest from their labours. I have, however, no hesitation in saying that a horse, provided he is of a sound, good constitution, may be kept on hard meat, and highly fed, for twenty years, if he live so long, without suffering in his wind, limbs, or eye-sight, if he be well groomed, and what the veterinary surgeons call prophylactic or preventive remedies are properly administered. We all know that from the great length of the arterial system, horses are subject to inflammatory complaints; but these complaints are acknowledged either to proceed from atmospheric causes, or to accompany sudden changes of food, temperature, &c. and more commonly attack horses that may be said to be only "half in condition," horses that are ridden about the country, and exposed to such disposing causes. What these preventives are I shall take occasion to mention as

I proceed. To the three objections which I have now stated to turning out hunters to a summer's run at grass, I might add a fourth; and that is, the bad effects which arise from the constant stamping of their feet to get rid of the flies, which materially injures them, and is often productive, not only of splents, but of *ringbones*, than which nothing is more difficult to cure.

Having recapitulated the disadvantages of the too common method of turning hunters to grass for the summer, I shall now state in what way they should be treated during those months when hunting ceases. My first object, it plainly appears, *is to obtain condition*, and to obtain it in a manner least injurious to the animal we have to deal with; and as it is useless taking up time in exposing past errors, I will proceed to detail the plan I would pursue were I a servant employed to get a stud of hunters into condition. It has been the fashion of late to be intricate on the plainest subjects; but saying much does not prove much. "*Non est quod multa loquamur.*" My argument will be the vulgar one of experience; and I will endeavour to make myself understood, so that, should any gentleman choose to let his groom read what I have written, he may not mistake my meaning. In my humble opinion writing on such subjects as these should be nothing more than a sort of literary conversation between the writer and the reader; and, after all, as Aristotle observes, perspicuity without meanness is the perfection of style; and common expressions must be best; for, had they not been proper, they would not have been common.

I have before made some comparisons between the race horse and the hunter (*p.* 30), conceiving the treatment of the one to be in many respects applicable to the other. I need not repeat my conviction that *condition* is *equally* essential to both. The chief points of difference between them appear to be in the sort of work they are called upon to perform. The one is not more than a few minutes in completing his task; whereas the other is often ten or twelve hours about his. The preparation, therefore, must be different; and much as I admire the economy of the racing stable, particularly their feeding and regularity, I would not fix upon a training groom as exactly qualified to get a stud of hunters into condition, any more than I would choose a thistle-whipping huntsman to hunt a pack of foxhounds. In the first place, the training groom would be apt to draw his horses too fine for the continued fatigue they have to go through; and in the next, although I admit that there is no strength without wind, yet he would be inclined to give them more of *quick work* than is necessary to prepare a hunter for the field. Good flesh, as I before observed, is strength; and in the preparation of a hunter, particularly if he be to carry a heavy man, to get him *high in flesh and strong in work*, is the perfection of the art of grooming. In one respect, however, the race horse and the hunter are nearly on equal terms. Each must have work, and each must have rest. The only difference between them here is, that the former rests in winter, and the latter rests in summer. Neither of them can be always on their legs, or they will be equally stale

in their way. But when the race horse rests, his condition is going on. He may have some green meat given to him, if there is any to be had at the time; but at *all* seasons of the year he is never deprived of his corn.

Lest it should be supposed that I am averse to turning hunters out at all in the summer months, it will be better, perhaps, not to proceed farther without explaining myself on that head. So far from being averse to it, I would strongly recommend it, under favorable circumstances. In case of having recourse to blistering, it is most serviceable; and after firing, almost necessary — but then they should be turned out only *at night*, and into a place where there is but little grass, and have two, if not three feeds of corn a day, but nothing else to eat till they go out, unless it be a few vetches, for four or five days at a time, when they are young and tender, in the months of May or June: but this should not be repeated more than three or four times, as they tend to make horses very foul, and when in pod are most injurious to them. It is not every one who keeps hunters that has paddocks to turn them into; nor, indeed, do they fall to the lot of many: but when they are to be had, the advantage is great, as a horse is safe in them, and the smaller they are, within reason, the better: for it is not the grass that we want, but the exercise and the moisture of the ground for their feet, and the bracing effects of the pure air. If only one or two hunters are turned into a large paddock, and the grass grows upon them, some sheep should be put in with them to keep it down. Their bite also sweetens the herbage, and

makes it more nutritious; but paddocks should never be mown. Paddocks, however, are always to be made, and at a trifling expense. A small piece of ground---say thirty square yards---is sufficient. Let it be hurdled around, and then lined with fagots reared up from seven to eight feet high. A stallion may be kept in these places with the greatest safety as to his breaking out of them, for he will never attempt it so long as he cannot see through or over the fence. The fagots, so far from being worse, are better for the use they are put to; and they are within the reach of every one who resides in the country, at five shillings a score, if he do not grow them himself. The hurdle that lets the horse in and out should often be changed, and then he will be still less inclined to attempt to break out.

However beneficial this turning out a horse in the summer may be, it is comparatively trifling with the advantages that are reaped by a winter's run. I have seen horses, as it were, *renovated* in their constitution, by being turned out for a winter; and, as far as relates to their legs and feet, it is, I think, the only *time* when anything effectual can be done for them, when the injury has been considerable.

I think I need say no more to convince the reader of my full conviction of the injurious method of turning hunters out to a summer's run at grass, and shall conclude that part of my subject with an anecdote which a friend of mine furnished me with the other day, so much to the point that I hope I shall be pardoned for introducing it here. I only lament that I have not the pleasure of knowing the

lady in question, that I might have an opportunity of conversing further with her on a subject on which her ideas were so congenial with my own. My friend was walking in the streets of London, when his eye was attracted by a remarkably fine pair of long-tailed coach-horses, which, by the arms on the pannel of the carriage, appeared to be the property of a rich old maid. On complimenting the coachman on their comely appearance, he remarked that "they were very well for their age---one of them being twenty-six, and the other twenty-three years old."---"I suppose," said my friend, "they have been much indulged."---"Not they, indeed, Sir," said *Coachee;* "they work as hard as anybody's horses on these London stones, and my mistress goes all over England with them to the watering-places in the summer; and as for grass, they have never tasted it since we have had them, for she says *she is sure it would give them the belly-ache.*" The old lady, it seems, acted on the good old principle of *letting well alone!*

Before I enter upon the system which I have pursued, and which I so strongly recommend, I will make a few remarks on what is called the Old Plan---that is, giving a hunter three months' run at grass, and taking him up the end of July or beginning of August---accompanied with some observations on what I conceive to be the best and safest method of treating them under such disadvantageous circumstances. The common method of treating the hunter that has been at grass has been to bleed him the third or fourth day after he comes to the stable, and about the seventh or eighth to

give him his first of a series of three doses of physic. The only remark that I have to offer here is, that the bleeding is not only useless, but improper; and the waiting seven or eight days for (in the language of grooms) "a little hard meat in him," before he has his first dose, is also equally absurd. As I shall have a good deal to say about physic, and its effects, in another place, I shall only observe, that, as physic is to be given at any time, and under any circumstances, with perfect safety, the sooner the hunter has his first dose after he comes into the stable, the better he is enabled to withstand the sudden change from the natural to the artificial state to which we are about to subject him; and the sooner will his habit of body be prepared for that excitement which his subsequent exercise and change of diet are certain, more or less, to produce. I have seen some of my acquaintance give their hunters physic when at grass, with the hope of preventing their getting too fat; but their expectations have failed, inasmuch as the aptitude to get flesh always increases after a horse has been well cleansed by physic, as training-grooms can more particularly vouch for. If, however, a person does turn his hunters to grass, I see no objection to their giving them physic if they suspect them to be foul or getting very gross in their habit, as they may do it with perfect safety in all weathers, provided the dose does not exceed four or five drachms of the Barbadoes aloes. It may be the means of forwarding their condition, by getting sooner into work, when taken up for the season.

As the system of getting hunters in condition which have been at grass is, in most respects, so well known, it would be presuming in me to attempt to give directions respecting it; I will, therefore, merely detail the plan I would pursue, had I a horse to deal with under such circumstances. My directions to my groom should be as follows.

The hunter should be taken up certainly not later than the twentieth of July. Soon after this period the nights begin to get chilly, and his coat would receive a check if exposed to them. It would lose that soft, silky feel, which it generally has if the horse is in perfect health previously to that time. When first taken to house he should be kept as cool as possible, and, if it can be avoided, there should not be *more than one horse in every other stall*, be the stable ever so large. We will suppose a man has six hunters, perhaps all kept in one stable in the winter. When his horses are first taken up, he should not put more than two or three at farthest into it, and the rest into a hack-stable or loose house, with the doors or windows open, so as to keep the temperature as low as he can. As time is precious, and, as before observed, physic is nothing more than the means of cleansing by evacuation the stomach and intestines, as sweating gets rid of the superfluous flesh and fat, the sooner he has his first dose the better. As his bowels will be relaxed by the grass he has been eating, his physic should be milder than usual; but that must depend upon previous knowledge of the constitution of the horse. Generally speaking, five drachms

and a half would be sufficient, if well prepared by bran mashes beforehand. It is ridiculous to see a horse in physic in July, just taken out of the open air, where he has been for three months, clothed up and hooded. He wants nothing of the sort: he may be ridden out naked; and if he refuse warm water, which most probably he will, he may drink at the first pond or running stream he meets with in his exercise. No one holds the danger from the operation of physic more cheap than I do. I could fill a volume with all the nonsense I have heard grooms, and sometimes their masters, talk on this subject. I conceive that, with common caution, a horse is in no more danger from a dose of physic than his master is from a dose of salts. I do not approve of strong physic; because it is useless to give it, when mild, with proper preparation, will do what is required of it; but it is not in the power of a drachm or two of *good* aloes to destroy a horse. A great Welch Baronet lost two if not three of his hunters one year in physic; but the fault must have been in the drug, or some great mistake must have been made. A valuable horse of my own once had a double dose given him by a mistake; the consequence was, he purged for three days and nights. I administered strong gruel with a horn---for he was very sick---to support him through the sharp fire; but not finding it produce the desired effect, and seeing his back-bone plainer than I liked to see it, on the third day I gave him a wine-glass of liquid laudanum, and all was well. I observed he soon recovered his strength and appetite, and was

none the worse in a few days. All this, however, is a digression from my present subject.

To return to the hunter. By the time he is ready for his second dose, he will be in some measure reconciled to the change of temperature---from the open air to that of a confined stable---and a little more caution is necessary during the operation of it. Unless the weather happens to be very warm, he should have a hood on him if he goes out early in the morning, and, at all events, one warm body cloth, or his coat may receive a check which it will not recover for some time. If he has had his first dose, a day or two after he was taken up---say the 20th of July---allowing seven clear days between the *setting* of each dose, he will be through it all by about the 17th of August, up to which time, and for a week afterwards, he should have nothing but gentle walking and trotting exercise, of about an hour and a half at a time, before the heat of the day; and by no means should a brush be laid upon him, as it opens the pores of his skin, and renders him more susceptible of cold. Indeed, all the grooming he requires at this time is to have his legs well rubbed---particularly with the hand---three times a day, and oftener if the circulation be languid, and his body well wisped with a good solid *hay* wisp, a little damped. Should a horse have had some physic at grass in the summer, or *late* in the spring, before he was turned out, and not appear foul, it may be better to stop a fortnight or three weeks between his second and third dose; and, if a bit of soft ground can be found, to give him a little

work in the time. If his two other doses did not work him hard, it will be advisable to add half a drachm of aloes to the third dose, as it will take more to move his bowels now than it did before he got the hard meat into him, and had a little work.

Having said that there is nothing to fear from the operation of physic, I beg to be understood to mean provided the horse has been properly prepared to receive it, and the drugs are good of their kind. By giving him two large loose mashes for two days in succession, the bowels become so relaxed as to prevent the possibility of danger; and by an alteration lately made by the veterinary surgeons, of having the horse exercised *on the day he takes the ball*, a milder one does the business, and the operation is much quickened. It generally begins to work on the evening of the day he takes it, and by stable time the next evening it is beginning to set, and the horse is comfortable and well, instead of enduring perhaps thirty-six hours of continued sickness. I have made up a great deal of physic at home, chiefly Mr. White's No. 2, only varying the quantity of aloes; but I strongly recommend my readers to procure it from a veterinary surgeon in their neighbourhood, as professional men prepare it in a safer and more convenient form, and cold water may be given with it, with safety, if a horse refuses warm. Grooms do not like this alteration of exercising the horse on the day he takes the ball, and will tell us it ought to lie in them for a day, or it does not operate so well. One

moment's reflection will convince us that as there can be no virtue in the aloe but that of clearing the intestines, the sooner it does its office the better. They might as well say that an emetic should lie a whole day in a man's stomach before it is suffered to operate. If calomel were administered in the ball, there might be some reason for its slow progress, but nothing else can justify it.

LETTER III.

THE EFFECTS OF CONDITION—THE STABLE, AND STABLE MANAGEMENT.

In all matters of domestic economy, maxims pass from mouth to mouth, and are established by tradition, without even making the experiment, as that might at once give them the lie. We seldom inquire into the causes of things continually before our eyes. Habitual acquaintance renders them familiar to our observation, and checks that curiosity which is the strongest incentive to knowledge. We see such things, but never inquire how they came to be so. The phenomena of disease---the phenomena of life itself---are not more unsearchable, or more difficult to account for, than are those changes and alterations which take place in the condition of horses. I once heard a veterinary surgeon of great repute declare, that he would give five hundred guineas if he could find out why a blind horse should have a smooth coat in winter and a rough one in summer, which happens to nine out of ten.

We are too apt to look upon a horse as a piece of mechanism which we can use at our pleasure, without ever considering that the machine must be in order before we can avail ourselves of its power. A horse out of condition, and a horse in condition,

certainly bears more resemblance to himself than a horse-chesnut does to a chesnut horse, but he is assuredly a very different-looking animal in one state to what he is in the other. *In persona*, if I may be allowed the expression, he is the same---*in re*, quite another being: in the one state, he is comparatively weak and powerless---in the other, equal to greater exertion of power and speed combined than any other animal which the hand of nature has formed. It has lately been the fashion to put the powers of man in competition with those of a horse, *on a journey*. Clad in a flannel jacket and trowsers, he may travel over as much or more ground in a week than a horse; but put a *proportionate weight* upon his back, and see where he would be! Surely the well-attested fact of Mr. Highwayman Nicks' ride to York must set this matter at rest* !

The period is now arrived when the condition of hunters is put to the test. Previous to the month of November no man who has anything else to amuse himself with, or who has a regard for his neck, or his horse, should be seen by a covert's side unless it be on a hack cub-hunting, which after all is but a melancholy recreation. The ditches are

* In 1696, Nicks, a noted highwayman, robbed a gentleman at Gad's Hill, in Kent, about four in the morning; but, apprehending that he was known to the person he had robbed, made for Gravesend, where he lost an hour in waiting for the ferry-boat, yet, by crossing the country to Huntingdon, and then keeping to the northern road, he reached York, and appeared on the bowling-green in the evening, as he proved upon his trial for this robbery. The Jury acquitted him, thinking it impossible he could be at two places so greatly distant between sun and sun.

not only so full of grass, or so "blind," as we say, that the best hunter on earth may be deceived into a fall; but the country in other respects is not fit to ride over. However soft it may be at the surface from the autumnal rains, the substratum is hard; and where cattle have trodden in the preceding winter, holes remain, which are not at this time visible, but which serve as a sort of trap for horses' feet, and are particularly dangerous and injurious to old horses. It is not necessary that a hunter should be a perfectly sound horse---that is to say, provided he be not ridden over a country till it is in a state to receive the pressure of his weight, without jarring him at his fences or in his gallop. By the first or second week in November, this is generally the case; and if a horse has been in the hands of anything like a groom, he ought by this time to be pretty well prepared for the field. By long-continued slow work ---but increasing in pace as his condition increases ---assisted by proper stable management, he ought now to appear by the covert's side with credit and advantage. What this work should be, and in what this stable management should consist, shall be the subject of the following pages.

The condition of a horse must proceed by slow degrees: it is the work of time; and it is in vain to expect it on any other terms than as the result of a long course of preparations, *followed by severe work*. In a clear fortnight after he has had his last dose of physic he should begin to do some work; for without it no progress can be made. This, however, should be gradual; and for the first month should consist of long protracted exercise, rather

than what is called "good work." He should be kept out of his stable for three or four hours in the course of the day; and if ridden gently across a country, and now and then with a pack of harriers (weather permitting), it will greatly promote his condition, by hardening his flesh, increasing his strength, and improving his wind. At this time the use of *alteratives* is indispensable. By their mild and gradual impression a healthy action of the bowels is obtained, and thereby what, in stable language, is called "fog," (but which might more properly be termed debility, or depression of strength,) is got rid of, and the general appearance and condition of the animal much improved. Indeed, without the use of alterative medicines---exclusively of physic---no hunter can be got into blooming condition; that is to say, to look well in his skin, to dry immediately after a sweat, and to be in full vigour of body. Of these medicines there are several sorts in use; but the diuretic and diaphoretic are in my opinion the best. It is almost needless to observe that the latter act upon the skin: but as sensible perspiration in the horse is not to be obtained by medicine without difficulty, and having recourse to larger doses than may be safe or convenient for him to take when at work, and it is *insensible* perspiration that we wish to obtain, these alteratives should be combined; for it is from their gradual and almost imperceptible operation that we are to look for the effect we wish to produce. Antimony forms the principal diaphoretic; and from its weight, a sufficient quantity--one ounce divided into four parts--may be given

him every day in his corn for eight days together; but this should be given when the weather is warm, or danger from catching cold may arise, from the pores of the skin being relaxed. With proper precautions, however, none is to be apprehended, and the effect on the general health and appearance of the horse is striking. If the diaphoretic alterative, in the quantity above stated, be not given before a horse begins to work, and the weather becomes cold and wet, it is better to combine it with the diuretic, by giving him a very mild urine ball twice a week, for three weeks in succession, with half an ounce of antimony, finely levigated, in each ball. These medicines combined will check that excitement of the general habit which always accompanies a transition from rest to work, purify the blood, and give tone and vigour to the system. Nitre has been much used by grooms as a cooling diuretic, and a preventive of disease from such causes; but it must be borne in mind that nitre is a strong repellant, and of a debilitating nature.

All this, however, without a good stable, and good stable management, is of no avail. It is a maxim as old as Hippocrates himself, that food should be proportioned to labour. Diet, therefore, is a most essential point to be attended to in promoting and preserving the condition of a horse; for, as evacuation is the cure, repletion is the cause of disease. Horses in a state of nature are subject to few disorders. As has been elegantly observed, "they contract no disease from unseasonable indulgence or inordinate revellings: the pure stream their drink---the simple herb their repast:

neither care disturbs their sleep, nor passion in flames their rest." The state, however, in which we keep them for the different purposes to which we apply them, is strangely at variance with this temperate and natural state; and it is only by constant recourse to physic and exercise that we can preserve their health under such trying circumstances.

We are told that in former times, before wheat was found out, oats fed the vassal and his lord, as they now do many a Welch Squire and Scottish Laird. Formerly wheat was given to race horses, as more nourishing than oats; but now the latter form the chief food for all descriptions of horses. Beans, however, have for some years been allowed to hunters, and when given with discretion are most beneficial. I remember hearing Mr. Warde exclaim, as his hounds were settling to their fox, and he expected a good run, "Now we shall see what gentlemen's horses eat old oats, and what eat new." I am inclined to think that this distinction may be applied to those horses which eat beans, and those which eat none; for they help to bring them home at the end of a long day, and support their strength in a run. They are said to dispose the constitution to inflammatory complaints, which I believe to be the case when given in large quantities to horses of plethoric habits, and whose work is moderate; but when given in proper quantities, are most nutritious and wholesome. Two single handfuls in each feed of corn is the allowance for a hunter who is fed (as he ought to be) five times a-day.

In the quantity of hay given to a hunter there is also a great alteration within my recollection, not

more than half the quantity being now put before him. About eight pounds a-day, or one truss a-week, is considered sufficient for a hunter that will eat five feeds of corn per day. A larger quantity is found to increase the size, consequently the weight of the carcase, to injure the wind, and destroy the digestive powers. Among the brute creation we find extraordinary instances of long abstinence, but the horse is not of that tribe. He is a voracious animal, and requires a daily supply of food: nevertheless it is advisable that his appetite should never be cloyed, but that he should always appear eager for his food on his groom coming to him after being shut up his regular time; and if one handful of good hay be found in his rack, he should have no more till next stable time, when his appetite will be sharp. If given to eat his straw, the setting-muzzle, in this case, must be made use of.

In consequence of the lateness of the hour of meeting with hounds---now seldom before eleven o'clock---hunters do not require so much food as they formerly did, when they were out a much greater number of hours from their stables; and there is no doubt, but at the pace hounds now go, an empty stomach is necessary, or why put the muzzle on the race horse? In Leicestershire this short allowance of hay has been carried to a great extreme; but a full belly will not do for that country; and amongst the Meltonians horses are not required to come out often, owing to their generally having such large studs.

Hunters are not always to be fed alike:

allowance should be made for the distance to covert; for when a horse has to go twelve or fourteen miles in a morning to meet hounds, he may be allowed a little more hay overnight, than if he had but four or five, as he will empty his stomach on the road, and there is reason to expect a long day. As to whether a hunter should have any water on the morning of hunting, that is a point not so much considered as it ought to be, for we should be guided by his constitution. If he is apt to scour, and throw off his meat on the road, I should recommend his having none; but if, on the other hand, he holds his meat well in him, has some distance to go, and is not called on till ten or eleven o'clock in the day, he should have six or eight swallows, or go-downs, as the grooms call them, between five and six in the morning. This quantity of water, or more, is always given to the race horse on the day he runs his race, as it makes him enjoy his food, and digest it afterwards, and it is all absorbed by the time he is called upon to run. Nothing is so apt to make horses scour as change of food and water; for which reason it is advisable that a hunter should go from his own stable to meet hounds, if the distance does not exceed fifteen or sixteen miles, rather than sleep out, and be subject to the effects alluded to. If, however, he does sleep out, and is affected by the change, he should be watered before he leaves home, and have very little where he sleeps, which will in some measure counteract the evil. One would suppose that this apparent derangement of the bowels would be most injurious to a horse which has to follow hounds; but I

remember being in the company of a very heavy and desperate rider, when this subject was discussed, and he assured us, that were he called upon to say on what day he considered himself to have been carried across a country in the best style, and with the least distress, he should say that it was by a horse that scoured most violently on his road to covert, and looked like a shotten-herring when he got on his back. All, therefore, that can be said on this subject is, that there are exceptions to all rules, and that the case in point is in favour of an empty stomach and a short allowance of hay. One thing is certain, that it is scarcely possible to tire a sound man, when in strong exercise, with an empty belly; but give him a good dinner and a bottle of wine, and he is soon defeated.

When on this subject, perhaps I may be excused for introducing an anecdote of a naval officer, who resided some years back not a hundred miles from Gloucester. The captain had a very good mare, on which he appeared one day by the covert side as usual, when, on some one remarking that she scoured very much, he observed that she had got a dose of physic in her. It appeared that his groom, thinking that a little rest would be of service to *himself* and the mare, had given her a dose of physic without his master's knowledge; but the captain was not to be shoved off in that way, and after d—g his eyes about half a dozen times, sent her to covert, and rode her the run, which she performed as if nothing more than common had occurred. This, we must also admit, is in favour of an empty belly.

I now come to the corner-stone of all conditions in horses---the stable, and stable management---the latter of which has undergone considerable alteration since I first began to keep hunters.

Were I to recount the numerous instances of the benefits arising from good, and the evils, disasters, and dangers which I have witnessed from bad, condition in my own and other persons' hunters, I could fill a volume. I shall, however, content myself with one or two instances of the *beneficial* consequences of *good* condition.

A very intimate friend of mine, well known in the sporting world, and an excellent judge, gave one hundred and fifty guineas for a horse called "Hermit;" but soon after he purchased him he was obliged to go into Leicestershire---not to hunt, but for the purpose of having the advice and assistance of the famous Doctor Chesher, for an injury of his spine, occasioned, it was supposed, by riding a hard-pulling horse. Being obliged to remain under his care for the space of two years, he took a house, and amused himself in the winter with his greyhounds, of which he had some of the best in England, as they proved themselves by their running at Newmarket and other places. During this time Hermit was kept in lavender. He had an excellent loose box, and his condition went on the same as if he had been constantly hunted. In the summer he was physicked, soiled, fed with carrots, and ridden quietly about, with every now and then a gentle sweat. In the winter he was regularly sweated, ridden with the greyhounds, and had some good brushing gallops; by which means, and being in the

hands of an excellent groom, his condition was as perfect as it was possible to make it. He looked big, and rather full of flesh; but it was that sort of flesh which increased rather than diminished his strength.

It is true that Hermit was a particularly fine fencer, and, if I may be allowed to apply such an epithet to a horse, he was an *elegant* goer in all his paces; but when *well clapped to* over a country, he had not the reputation of being a stout horse. It might be said of him, as was said of another horse by a celebrated sporting character who wanted to account for his not turning out to be quite so brilliant a hunter as he had represented him to be to a person who had purchased him---that he was a very good horse when he went *his own* pace, but when he wanted him to go *his* pace, he did not suit him. This I take to have been in some measure the case with Hermit. When the pace was not tremendously quick, he was a delightful horse to ride over a country, with a perfect snaffle-bridle mouth, and he could hop over all the gates in the country with the elegance of a *Vestris*. In Leicestershire, however, he was unknown as a hunter, any farther than now and then appearing by a covert's side, with his owner on his back, but who was forbidden the pleasure of riding him to hounds. Notwithstanding this—notwithstanding that he had never been seen to do anything in that country but canter up and down by the side of a covert, and hop over a gate or two, which was as easy to him as going through it ---yet, strange to say, he was purchased by the late

Capt. St. Paul, at the enormous price of six hundred and fifty guineas!!

Now, reader, we will suppose that this Hermit, who only four years before was purchased at the vulgar price of thirty-five pounds, had been turned out for the two preceding summers in one of those fat meadows in Gloucestershire by the Severn's side, where his owner lived, and had been taken up in the months of July or August, where, under such circumstances as I have mentioned, would have been found the six hundred and fifty guinea customer? No; it was to his blooming condition ---the work of two years---and to that alone, that his owner was indebted for the immense price he got for him. His frame was brought to a pitch of perfection, by a continuation of high keep and good grooming, that made him quite a different animal to what nature had intended him to be.

A curious and rather unfortunate circumstance attended Hermit's *debut* in Leicestershire with his new master on his back. In a most severe burst, he stood still in the middle of a field, and went into strong convulsions. His rider bled him in the mouth for instant relief, which being observed by Mr. Loraine Smith, a caricature soon made its appearance, representing the scene described, under which were written the following words: "An Apostle administering relief to a distressed Hermit." It is but justice to observe that the horse was not well when he went out in the morning; and all who have witnessed Captain St. Paul's manner of "putting them along," can easily conceive the pos-

sibility of his riding a better horse than Hermit into convulsions. In the course of a short time, however, Hermit came to the post again, and was a great favorite of his master's for many years after he quitted Leicestershire.

LETTER IV.

STABLE MANAGEMENT—CASE OF FERRYMAN.

HORSES are to be purchased in all places and at all times, but condition is not to be purchased with them; for which reason, he who wants to increase his stud should always buy his horses in the spring of the year, having then the summer before him, in the course of which, if the animal is a sound one, his condition can be accomplished. Upon this principle I looked into Tattersall's some years since in the month of May, when I perceived a strong, cross-boned looking horse, with some good hunting shape about him, "going" at 50*l*., and before I could get around him to ken him over, he was "gone." Finding he was purchased by a dealer, I gave him five pounds for his bargain, and took him away with me. Soon after my arrival at home I met with a person who knew him, and who informed me that he was got by Joe Andrews, and was a capital fencer, but that he could not be kept in condition in the stable; that his legs always filled after work; and, in short, to use his own emphatical words, he looked like a hunted devil in the winter.

Here, then, was a field for experiment. On

looking at this horse, I accounted for his not being *kept* in condition by being satisfied that he *never was in condition*. He loooked all head and shoulders, and his belly was gone. I was immediately convinced that there was a debility and a want of tone about him that could alone be got rid of by an entire change of his constitution, and which change could only be effected by the stimulus of high keep, assisted by alterative medicines and good grooming. Suspecting that his organic powers were weakened, and to prepare him for the change, I gave him three doses of *very mild* physic, only five drachms of aloes at intervals of twelve days, which I found quite sufficient to work him after two days preparation by mashes. In the course of the summer I put him through three courses of mercurial alteratives, and gave him three feeds of good old oats per day. He was never out of his loose box, except to drink at a pond twice a-day, and ate no green meat, with the exception of a few vetches twice, for six days in succession. He had three more doses of physic, equally mild, in the month of September, and I hunted him the following season. I found him exactly what my friend had described him to be---an uncommonly fine fencer and a good winded horse, but in other respects no better than the common run of hunters. When they were sick, he was far from well, and no liberties could be taken with him. His legs filled after work, his flesh melted away like butter in the sun, and he would not come again, after a hard day, under a week or eight days.

The next summer I treated this horse precisely

in the same manner as in the preceding one, with the exception of giving him two bushels of oats a-week, if he would eat them; and at the commencement of the second season I witnessed the change that had taken place in his constitution. His legs were perfectly fine before and after work, and he fed well; his body spread, and his carcase dropped; and he did not sink, as before, from the effect of a good day's work. Hounds, on some days, could neither go too fast nor too long for him; and in consequence of his clearing a high timber fence at the end of an hour *best pace*, I sold him to a Noble Lord for two hundred guineas, who, from his being so capital a brook-jumper, changed his name to *Ferryman*, and one day saw out all the second horses on him with Sir Thomas Mostyn's hounds, in a most severe run from Shuckburgh, bringing his rider a long distance home at night, when several horses were left in all parts of the country.

Notwithstanding what I have said this was not naturally a good horse. When I first had him I could beat him to a stand-still in a quarter of an hour, and to the last he had his good and bad days. In some respects he was favored by nature. From his great length of frame he had a particularly smooth way of going over ridge and furrow, without which no horse can live long over a country at anything near the top of his speed: leaping was, comparatively, little exertion to him, and his pipes were remarkably clear. With all these advantages, however, it depended upon whether he were fit to go that he could carry a man to hounds; he required

but little work, for if not above himself he was soon beaten. To sum up all, when his condition was good he was good. If not fit to go, he would not ---he could not go; for he was by nature a very middling horse.

I think I have in this instance clearly shewn the good effect of condition, or the power of art over nature. With respect to the horse in question it is certain that in a natural state he was a bad horse. In an artificial state---that is, in good condition, from a long succession of hard meat and strong work---his natural defects were removed, and he became a good horse; for at times he was a brilliant hunter, and certainly one of the most gentlemanlike horses that was ever ridden over a country. I shall mention one other circumstance respecting him, and then dismiss the subject.

On going one day into my stable I observed my groom in the act of giving him a dose of physic, and was proceeding to turn his head around again to the manger, but not seeing the ball go down his gullet, I desired him to let him remain where he was. In about five minutes he brought the ball back again *through his left nostril* into my hand. This being something new to me I was alarmed, and sent for a neighbouring farrier, who was very expert at the operation, to give him the next ball, when, after a struggle, he produced it in the same way, but it was followed by a small quantity of blood. The farrier told me he had only once witnessed a case at all similar to this, and that was of a stallion to whom a whole egg was given, which got up into his head and killed him. Whether this

easy passage from the throat to the head had any thing to do with the clearness of wind which Ferryman possessed, I leave others better acquainted with anatomy to determine.

I think I need add no more to prove the value I set upon the condition of a hunter---being no less in many instances than that of the horse himself. For example, how many horses have I seen that I should have been glad to have purchased at much more than the price asked for them, if I could have purchased condition at the same time? But to see a promising horse in the middle of the season, when he is immediately wanted, with his coat curling in all directions, and his flesh as soft as beef upon him, what expectation is there of any thing but disgrace and danger from the possession of him?

As no workman can make good work without good tools; so no groom, however good, can get a horse into condition without a good stable. In the first place it must be dry—in the next, it must be warm. I am aware that what I have to say on this subject will be objected to by some of the old and slow ones, who preach against the dangers of hot stables; but, for my own part, experience has led me to declare, that so far from ever having witnessed the ill effects of a hot stable, I never saw a hunter in good condition out of a cold one. Nay, I will go further, and assert, that a horse, which no exertions of his groom can get to look and to be well in a cold stable in the winter, shall, on his being removed into a warm one, be in good condition in a month. Not being a philosopher I cannot explain

the why and the wherefore of this apparent phenomenon. All that I can say is, *that it is so;* and were I to hear Sir Humphry Davy himself expatiating upon the impropriety of horses being shut up in a hot stable, breathing an under-oxygenated air; were I to hear him say that atmospheric air was the very pabulum of animal existence; that it is contrary to nature and nature's laws to breathe any other---I should listen to it all, unable to answer him; yet I should say to my groom, don't mind what the philosopher says; stop up every crevice in the stable, taking care only that there be a pipe or two to take out the foul air. Never mind the fresh air, enough of that will find its way through the key-hole, but let there be a vent for that which is fetid. It is not in compliance with the prevailing fashion of the times that I speak this language. Were my object to keep a horse merely in a state of convalescence, I should keep him in a cool stable; but if I want to prepare him to follow a pack of fox-hounds, with a man upon his back *determined to ride by the side of them*, I must keep him in a warm one. Why this is so I cannot exactly prove; but that does not alter the case: my argument is the vulgar one of experience: "seeing is believing;" and we might as well reject the truth of geometry, because we may be unable to comprehend the higher branches of it, as deprive ourselves of the effect because we are ignorant of the cause.

"Felix qui potuit verum cognoscere causam."

We are all, however, wise after experience; and a man should be committed for contumacy who will not believe what he sees.

I have always thought that there is a striking analogy between a horse and a man, as far as their condition is concerned. Each enters on his training with physic, and concludes it with severe work: each is at his best when least reduced by sweats: each is capable of doubling his natural and ordinary powers. The skin of the horse is also his complexion; and it is not until the prize-fighter strips in the ring that his good or bad condition is ascertained. Nothing can exceed the beauty and lustre of some horses' skins when in what is called "blooming condition;" on the other hand, nothing can be more unsightly, or even appalling, than the death-like appearance of the staring coat of half-starved dog-horse awaiting his fate in the kennel orchard on a cold winter's day. Let us therefore bestow a little time in endeavoring to discover why a warm, or what by many would be called a hot, stable is essential to the good condition of the horse.

It is with all improvements upon old systems, as with every infant science, we believe before we consider, and condemn before we investigate; by which the simplest truths are too often disputed. In the first place, we must recollect that the horse is originally a native of a warm country; and we need go no farther than the Scotch Highlands or Welch mountains to prove that he degenerates in a cold one. We, therefore, may conclude that warmth is congenial to his existence. In the second place, as we find the body is as regularly renewed and replenished as is the sweat of the brow, whatever promotes that renovation — which warmth, by

increasing the circulation, must do---is in this case beneficial. In the third place, they who attend to such matters will find that the constitution and habit of a horse undergo a change when kept for some time in a warm stable, favorable no doubt to the work he has to perform as a hunter in the stable of a hard-riding man. He is not that gross animal which he might otherwise be if a hard feeder, and kept in a state more nearly approaching to a state of nature. This we may attribute to the increase of insensible perspiration, occasioned by increased circulation, whereby the grosser particles of the body fly off and are got rid of. In this state he would bear some comparison with a well-fed English farmer, when put to perform feats of activity with a man of more refined habits of life, where nineteen times out of twenty he would be defeated. From the *athletæ* of ancient Greece and Rome to the present day, the first process of training has consisted in purifying the body, and *preparing* the way for increase of vigour and activity. This was not only done by physic, but by sweating, which more effectually removes the superfluities of flesh and fat; and, when added to exercise, promotes absorption and secretion, and invigorates all parts of the body. I do not mean to say that I would keep a horse in a state of perspiration; but I would keep him in a state of warmth sufficient to increase his circulation, and keep his coat down close to his skin, which is a certain criterion of his being warm and comfortable.

As there is an analogy between a man and a horse in work, let us carry it a little further, and

ask whether, after a hard day's exercise in the winter, a man would recover sooner if he passed his evening in a warm room, or if he passed it in a bivouac, or in a room that was cold and damp? This I think would decide the question between a warm and cold stable for a hunter after the fatigues of the day. I shall, therefore, conclude my remarks on this part of my subject with observing, that if it be possible to get a horse to live well in a *cold* stable, which would be a novelty to me, all the grooming on earth would never get him to look well in a *damp* one. A horse is all but a barometer, being most sensibly affected by change of weather. As to hot stables being prejudicial to a horse's eyes or lungs, I will not admit it to be case, provided there be a vent for the foul air to escape, and no accumulation of foul litter be suffered to remain. It is that which does the mischief; and all grooms who suffer a horse's bed to become foul, or a heap of damp or wet litter to remain in the stable because they are too idle to take it out-side the door, ought to be kicked out of it.

LETTER V.

HOT AND COLD STABLES — TREATMENT AFTER A SEVERE DAY — CLOTHING — HAY AND WATER — CLEANLINESS — OVER-REACHING.

I NEVER had a hunter go blind in my possession, although I have always used very warm stables, not lower than 53° of the thermometer in the winter time. As to coughs being produced by hot stables, I should much sooner suspect them to be the produce of cold or damp ones. Blindness, we know, is frequently an hereditary complaint; but coughs and broken wind and blindness *generally* arise from plethora, the consequence of bad grooming, in not having recourse to preventive measures in the stable, and suffering horses to accumulate a great quantity of bad flesh in the summer. In a large mass of blood, as in the horse, humours will circulate; and there is in some horses a strong disposition to get flesh and become plethoric, which accounts for their becoming foul in their work so much sooner than others, and requiring so much more work to prepare them for the field or the starting post. When Goosander, the dam of Sailor, winner of the Derby in 1820, was in training, they were obliged to stop and sweat her the fourth day on a journey---such was her aptitude to get flesh.

Although with all descriptions of horses this is the better extreme of the two, it is very injurious to legs. I once had a horse of this description, which it was with difficulty I could keep in any place without knocking his legs to pieces with work. I sold him to a friend for a large sum, and entreated him not to turn him out with his other horses in the summer, as, knowing his constitution, I feared the consequence---exclusively of the loss of two years' condition which he then had in him. He, however, was turned out, and came up extremely fat, with what is called a grass cough upon him. In a fortnight after he had been in the stable he was attacked with inflamed lungs, and in a month he was broken-winded.

Setting aside natural defects and pulmonary disease, which we call "distemper," arising generally from atmospheric causes, I should as soon look for the glanders in my stable as a blind or broken-winded horse, if managed in the way I have described---the chief advantage of which consists in not subjecting nature to violent and sudden changes, and in preventing horses from helping themselves to food *ad libitum* in the summer.

It is quite a mistaken notion that a horse with a long coat on his back is less liable to catch cold than one that has a short one. Were I in a situation in life that required my riding about the country, putting my horse into all sorts of stables, and trusting him to all sorts of grooms, I would use every means to put a good coat on him; and for the following reason:---in the first place, it lies closer to him, and is warmer; and in the next, it is much

sooner dry. When a horse has a long hollow coat upon him, the wind blows it up and exposes his skin; but, what is worse than all, it is many hours before it is dry after a sweat, or rain, during which time it must contain all the chilling properties of wet clothes. A horse with a short fine coat is not subject to that sudden and premature shedding of it which Mr. Richard Lawrence, in his excellent paper on diseases of the lungs*, mentions as one of the causes of inflammatory attacks. Although the skin may be said to be generally the complexion of a horse, there are some horses which no exertions of a groom can get to wear a good coat, and are exceptions to the rule of looking well and being well, of which the famous Parasol was one, even when quite fit to run.

Another argument against hot stables is, that horses kept in them are liable to catch cold in bad weather by a covert's side. My answer to this is---that if his rider will not let his horse stand still too long, and *will keep on his back*, there is no danger of his catching cold. There is considerable warmth in the pressure of a saddle to a horse's back with weight upon it; and there is that kind of animation in horses with hounds which keeps their blood in circulation.

Now I think I have said enough on the subject of getting hunters into condition; and the next thing is to keep them in it; to make them perform their work to our satisfaction, and to get as much out of them as we can for our money without injuring them; for in "bringing a hunter round again," as

* See *Sporting Magazine*, N. S. vol. ix. p. 226.

we say, after a severe run, good stable management is put to the test; and in which some grooms will much excel others, as all gentlemen who have known the pleasure of having a good one and the misery of a bad one can testify. I have no hesitation in saying that one man shall bring a horse out again in four clear days in better form than another shall in six.

Although it is impossible that an uneducated man, ignorant of the relative powers of medicines, can be a good farrier; yet, as a man may be a good farmer or a good gardener without having read Cato de Re Rustica, or Mago the Carthaginian; so it is possible that a man who cannot write his name may be a good groom, provided he have been brought up under a good one, and only acts upon what he has seen to be experimentally efficacious, and does not venture out of the beaten track. As, however, no man can make good work without good tools, so no servant can do his duty by a stud of hunters without proper materials to go to work with. He must have a good stable, some loose boxes, and a good saddle-room with fire-place: he must have lots of horse-clothes of all descriptions, bandages, hot water, gruel, lancets, tweezers, and *a few drugs*—the very best old hay and corn, good exercising ground, and, above all, plenty of strength in his stable; for there are two ways of dressing a horse—one to warm him, and the other to starve him. Dressing a horse vigorously removes obstructions in the smaller vessels, promotes the circulation of the blood, and in bad weather is a substitute for exercise.

As skill and judgment are necessary in reco-

vering a hunter after a severe day, which I shall treat of presently, so are they wanting to prepare him for it; and if not prepared he cannot go, for, as old Frampton, Master of the Horse to William the Third, observes, "the best *undieted* cock is unable to encounter the *worst* that has been carefully dieted:" and so it is with a hunter; for a middling horse fit to go will beat a very good one that is not so.

With regard to a horse coming round after a hard day, even supposing him to be in the hands of the best of grooms, that must in some measure depend on the stuff he is made of; but, generally speaking, he should come out about the sixth day after the severest run. If his legs have received no injury, he should come out three times in a fortnight, at least during the open weather; and he will be the better for being out twice a week if there have been no tiring days. Some horses require much more work than others; but none of them can *go the pace*, and continue it over a country, unless they are in strong work. Were I asked when I was best carried for an hour without a check, I should say it was by a horse on whose back I had been nine hours with hounds on the preceding day. This, of course, was the effect of accident. A boy mistook a pot of blistering ointment for one of liniment for the heels, and rubbed it well into all my horses. The horse I allude to, having been the property of an old lady, and looked after by her coachman, had had his legs trimmed, which made the hair strong and bristly, so that he suffered less than the rest; and by the help of a couple of urine

balls and fomentation he soon recovered. The consequence was, I rode him these two days in succession, and I shall never forget the way in which he carried me on the second. Milton, the dealer, gave 250 guineas to a master of fox-hounds for this horse when fourteen years old, and sold him to a Metropolitan sportsman, who broke his leg the first day he rode him.

I never had the curiosity to ascertain the number of days' hunting I have had in any one season, much less the number of times any one particular horse had carried me; but I recollect the celebrated Captain Barclay telling me, on the last day of Sir Thomas Mostyn's hunting for the season, that he had been carried eighty-two times that winter by four horses---being twenty times and a half to each horse---which struck me as being a great performance, considering the Captain's weight, and the strength of the country (the Bicester) in which he hunted.

General rules cannot be individually applied; but there is one respecting a hunter which I have held inviolable; and that is, that under all circumstances, whether the intervals between his hunting have been long or short, he should have a sweat, and go for a mile nearly at the top of his speed on the day before hunting. I have generally adopted the following plan:—

Let some heavy clothes be put on him, and, with a light weight on his back, let him go at a gentle rate six or eight times around a large field that rides a little deep, till he sweats kindly. Let him be followed to the place by a man with some

dry clothes and a scraper, and, taking him into some building, or under a warm hedge, let him be well scraped, and have on his dry clothes. Then, if short of work, let him have a good gallop for a mile, and walk home. This treatment, with proper care, is unattended with any danger of catching cold, and, if followed by *a proper allowance of hay and water*, will give him a wonderful advantage over those horses which have not been doing what he has done, provided he drop into a quick thing with hounds the next day. I have seen hunters led to be sweated by a boy riding a hack; but however great an advocate I may be for preserving horses' legs by keeping weight off them as much as possible, yet a horse cannot, in my opinion, be worthy the name of a hunter if he cannot carry a boy in his exercise.

Having laid some stress upon the words, proper allowance of hay and water on the day before hunting, I will proceed to state what I consider that allowance to be. In the first place, if a horse will eat his corn in the morning without water, he should have none till he comes in from exercise, and is done up, which should be by ten o'clock at farthest. He should then have half a pail of water*, and a proportion of his hay, which should not exceed, for a moderately-sized horse, ten pounds a-day. He should then be shut up till four, when, before he is dressed over, he should have another half pail of water, and no more until he returns from hunting the next day, unless it be a few swallows on the

* On days not preceding hunting this quantity of water is not sufficient. He may have three-parts of a pail in the morning, or a few swallows at night.

morning he hunts, when his groom first comes to him. If this quantity of hay is not sufficient to satisfy his appetite, and there is an appearance in the morning of straw in his manger, as if he had been eating it, the setting-muzzle should be put on him at ten o'clock, and he should remain on it for the night, but his groom should be with him by five in the morning, to relieve him. He should then have his two feeds, at an interval of an hour, and proceed to the covert at a gentle pace. If when there---provided he have been treated in the way I have prescribed---he cannot carry his rider as he ought to do, we must conclude nature forbids it, as he will have had every assistance from art.

Long days with hounds---by which I mean severe running, with perhaps a brace of foxes, and upwards of twenty miles home afterwards---are most injurious to hunters, and call forth all the skill and judgment of their grooms to recover them from their effects. If mere fatigue be the consequence, rest, that *vis medicatrix naturæ*, will do all that is necessary: but if a horse is what is called *over-marked*, his groom must be on the alert. There are two or three directing symptoms which cannot easily be mistaken. In the first place, his appetite fails him, and he is very greedy for his water. His respiration is not so smooth as it should be, and there is a considerable relaxation in the muscles in the interstices of the hips. Notice should also be taken of his pulse; but if that is not understood by his groom, the inside of his eyelids should be examined, and if fever is denoted by them he should lose a gallon of blood, but not otherwise. A pec-

toral ball, and two ounces of nitre in his water, should be given him; and, instead of his corn, he should have what gruel he will drink, and a large bran mash, made rather thin, and nearly cold, which will be not only most grateful to him, but, by relaxing his bowels, will prevent fever, which is certain, more or less, to accompany him. Sometimes inflammation comes on very rapidly after a hardday, bidding defiance to all precautions, and too often, if it does not destroy him, renders the horse unfit for a hunter, as it generally terminates in his feet. If he does not cast his hoofs entirely, they become what is termed "pumice," and take a long time to recover. Horses that have had fever in their feet generally go on their heels afterwards, and the inside of their feet becomes convex, instead of being concave.

I had a remarkable instance in my own stable of the rapidity with which inflammation of this sort attacks horses that have been over-marked. I had seen one very quick thing of fifteen minutes, and another of an hour, over the finest part of Leicestershire; and although my horse was at one time a good deal beat, he came home very cheerfully, and I had no reason to expect mischief. Before nine o'clock that night, however, he was quite blind, and nothing but the assistance of a veterinary surgeon, who was at hand, and who took nine quarts of blood from him that night, and three more the next morning, besides physic, clysters, &c. saved his life. On the third day his eyesight returned, but the fever settled in his feet, and he was only fit for harness at the expiration of twelve months.

This happened in the month of November; and previously to my purchasing him he had been turned out on very good land for the summer months, to which I attributed the loss I sustained by him: for had he been in my possession six months sooner, I feel confident it would not have happened, as there was nothing in that day's sport to have injured a horse whose condition had been the work of time.

When I first began to keep hunters, we knew nothing of those great restoratives in the stable---*flannel bandages, hot water for legs, and gruel.* Except in case of illness they were never thought of. An old writer on farriery, the *Sieur La Fosse*, speaks of "the great advantage of keeping horses' legs warm, as preventing glanders and other accidents;" but it is only within these few years that bandages have been applied as part of the clothing of a hunter---the benefit of which is, in my opinion, incalculable. By their use circulation is kept up in those parts where it is apt to be most languid; and the practice of washing legs in very warm water, and swathing them in large folds of flannel, takes off soreness and inflammation from blows and other injuries, which all hunters are liable to in a run over a strong country. Another advantage attending them is, that they admit of a horse being shut up in half the time it formerly required to clean him, which enables him to lie down, or roll, which he will always do if in a loose house, before he gets stiff from his work.

When a horse has had a very hard day, I have

found the following treatment safe and effectual in bringing him round again quickly.

There is a cleanliness in not letting a hunter be taken into his stable until the *rough dirt* which hangs about him is removed; for which purpose he should be taken under a shed or into another stable; and the quickest method of removing it is by the means of a birch broom. Three minutes will accomplish this. He should then be taken into his own stable, have two or three quarts of tepid gruel, and his feet and *legs above his knees and houghs* should be well washed in water nearly hot. When sponged well with strained sponges, one set of bandages should be swathed around them. His head and body should be well dried, which, if he is full of hard meat, will not occupy more than an hour, when he should be shut up in a loose house, well littered down, and a small feed of corn allowed him. In about two hours his groom should come to him again; his bandages should be taken off, his legs well wisped and hand-rubbed, his head and body lightly brushed over, and a dry set of bandages put on. A luke-warm mash, with a feed of oats in it, and three parts of a pail of tepid water, with a very small quantity of hay, will make him comfortable for the night; and on the following morning he should go to exercise as soon as it is light, and be walked for an hour with an extra cloth and a hood. He should have tepid water all that day, and a liberal allowance of it, with his usual oats if he will eat them, but no beans. If his appetite fails him, and does not return before

shutting-up time that evening, he should have half a cordial and half a diuretic ball mixed together; which, with a liberal allowance of tepid water, and an hour and a half walking exercise on the third day, will so far recover him as to enable him to return to his former high feed on the fourth; on the fifth or sixth have a sweat; and on the seventh be fit for business again (as far, at least, as his constitution is concerned) after *the hardest day*, and will carry his rider with more ease to himself than if he had not gone through it.

When a horse is in all other respects right, and in prime condition, it is one of the most provoking circumstances attending a stable of hunters to find him with a *bad over-reach*, which will prevent his hunting for a fortnight, or perhaps more. This injury has been generally supposed to have been inflicted by the toe of the shoe; to obviate which blacksmiths most commonly square it, when they shoe a hunter, leaving a small portion of the hoof projecting over it. Ten years ago (from 1823), a good judge of these matters informed me that over-reaching was not done by the toe, *but by the inner edge of the inside of the shoe;* and taking me into a blacksmith's shop, he convinced me of it by passing my finger along this edge of a new shoe, which I found was almost as sharp as a knife. It is in the act, it appears, of drawing back the hind leg, after having by an over-exertion of the hind quarters over-stepped the fore leg, that this incision is made (often half way up the sinews), which I always considered was done by the toe. When made

acquainted with this, my surprise ceased at seeing horses' heels and sinews nearly cut off by what I supposed to be the blunt or almost round edge of the *outside* of the shoe. I have ever since had the inside edge of the hind shoes what the blacksmiths call "bevelled," or rounded off, and have never had an over-reach. All horses are more or less subject to over-reach, particularly in countries where there is much brook-jumping.

LETTER VI.

STRONG WORK NECESSARY—ILL EFFECTS OF TOO MUCH REST—NECESSARY QUALIFICATION OF THE GROOM.

ANIMALS---particularly horses which we take under our protection---are no longer strangers to pain and sickness; but, like ourselves, struggle through a "frail and feverish being" in continual danger of their lives from illness; besides a thousand accidents to which they are exposed from the uses to which we apply them, and the various functions and operations which man, not nature, calls upon them to perform. It is a subject, therefore, beneath no one's consideration as to whence these evils arise, and how they may be remedied: to which may be added, that in few articles which contribute to the amusements of the upper ranks in life is there a larger capital embarked than in good hunters---several studs of which, within my knowledge, have cost their owners no less than five thousand pounds, and upwards. Now, as Mr. Richard Lawrence observes in his Essay on Diseases of the Lungs, to which I alluded in my last (*p.* 79), horses kept in a forced and preternatural state are "always on the verge of some inflammatory disease," the man who may point out one single hint for their preservation, or suggest any expedient

by which their powers may be applied to advantage, and with safety, by those who have purchased them so dearly, is as much entitled to be heard, and does as much good in his way, as the skilful and scientific artificer who invents the most powerful and complicated machine. The one by the help of his mental faculties produces mechanical power far exceeding natural force; so the other by his humble means increases animal power in a ratio comparatively great.

A celebrated professor of physic in a neighbouring nation, in the luxuriancy of his imagination, considered man as a machine, and attempted to explain the phenomena of animal economy by mechanical and physical principles. The pride of man, however, which will scarcely stoop to take a lesson from the instinct of brutes, however home it may apply to him, felt insulted by this comparison of intellect with force, and the Doctor got scouted for his pains. Were I, in the indulgence of my fancy, to compare a horse to anything so much beneath him as that which could be formed by man, I should say he resembled *an organ*, on which, if the pipes and tubes are in order, and the bellows good and strong, a merry tune may be played with the help of a delicate finger. How then this instrument (to our pleasures) is to be kept in tune shall be the subject of my farther observations.

Next to the article of food in the condition of a race horse or a hunter, is to be considered the work he is to do; for without the one it is no matter how well he may be supplied with the other: and we may just as reasonably expect crops to arise out of

the ground without awaiting the ordeals of nature, as to see a horse in condition without a long continuance of good food and strong work. In administering work to the race horse consists the chief art of training; and it is a matter of no less importance with a hunter in the stable of a man who wishes to distinguish himself in the field, and *not to run the risk of killing his horse every time he goes out.*

As far as regards the last mentioned circumstance, the chief consideration with me has always been---not how long or how severe the day's sport may have been, *but how my horse has been prepared for it;* and it is a consolation to hard riders to observe, that, in my experience in the field, out of the great number of horses which I have seen tired, or what is called "dead beat," with hounds, I have never once known death to be the consequence, unless it were to those who were short of work, and not sufficiently prepared. Were I to enumerate all the instances with which I am acquainted of horses being lost from this cause, it would be tiresome and unprofitable to the reader; but this much I will venture to assert---that it is not in the power of the best run a fox can shew to cause the death of a good hunter, in good condition, and fairly ridden, provided he have been out with hounds and seen a run within the five or six preceding days, and had a good sweat with a good brushing gallop after it on the day before, with proper attention as to feed, &c. in the stable. A horse may be so tired as to lie down in the field, yet it is generally the fault of his owner if worse consequences ensue.

I have before observed that I never had but one dead hunter (*p.* 25) drawn out of my stable, though I have had many tired ones come into it; and I in great part attribute my good fortune in this particular to the invariable rule I have made, let the weather be ever so bad, to give my horse some good strong work, and to cause him to sweat freely on the day before hunting. I have always been aware that when the wheels of nature are clogged, the machine cannot only not go on as it should do, but is in constant danger of being broken or destroyed.

It may be here observed that the race horse does not sweat on the day before he runs. This I admit is true; but the race horse in training, when well, is always going. He does not, like the hunter, lie still---with the exception of an hour's walking exercise---for two or three days after his last day's work.

Having had a good deal to do with private training, I may be allowed to say that the very best effects are to be found from *gentle sweats, often repeated.* They keep a horse light and free in his body, without that injury to his legs by what are called "brushing gallops," in which every sinew about him is put to the hazard. Long-continued exercise, we are all aware, is of the greatest use in unloading the bowels, giving firmness and elasticity to the muscles, and promoting the general secretions; but a horse cannot be fit for such severe and trying exertions as he is put to in the field unless his vessels are kept clear and open, and his blood in a proper state of fluidity---frequently cleansed of its excrementitious matter, which so powerfully contri-

butes to disease, after work. This can only be done by repeated perspiration; and I have heard veterinary surgeons say that the perspirable matter which flies off through the pores of the skin is of more consequence, as far as clear wind and condition are concerned, than all the other secretions.

What I have now said chiefly applies to the state of the blood. The state of the bowels is equally important. Rest not only generates a redundancy of blood and humours, but the bowels become overloaded, and distend beyond their proper size, in which state violent exertion must always be attended with danger. In perusing an old article on farriery, I recollect being gravely told that a horse should not be ridden with fox-hounds under three weeks after a dose of physic, or with stag-hounds under a month. All this is laughable; but, if true, what would become of the race horse, who sweats six days after his physic sets? For my own part, were I to know to a certainty that I were to see a severe day's sport with hounds, I should prefer riding a horse which had gone through a dose of physic ten days before: I should prefer this, not only as a preventive of danger after it, but with the confidence that I should be better carried than if he had not had it.

The ill effects of rest, and the good effects of work, on the powers and energies of a horse are astonishing. In long-continued rest his flesh becomes soft and flabby, and the muscles lose their elasticity, and even their substance. This is particularly exemplified in the human subject; for, let a man forego the use of one of his legs for twelve

months, the muscles of that leg will fall away, though they will in some measure recover on his resuming the action of the limb. With horses lame in the feet this is also plainly shewn. The muscles of the chest fall away, because they are not called into their *proper* action, which a cripple has not the power of doing, although he may work every day. This gave rise to the vulgar, but now nearly exploded idea of chest-foundered horses, whereas such a complaint does not exist. The evil lies in the feet; and the wasting of the muscles of the chest is the effect, and not the cause. In strong work, when a horse is sound every muscle and fibre of his body are braced, as it were, until they become as tough as whipcord.

Not only the muscles of the body, but the lungs also, are powerfully strengthened by good work. The quickness of respiration by repeated galloping produces an elasticity in these organs far above their ordinary powers; and as, particularly with hunters, *wind is strength*, it is a consideration of the highest importance to a man who rides over a country, as far as himself, as well as his horse, is concerned, that his hunter be in *good wind*, for without it the best fencer is powerless and dangerous.

As far as relates to the proper attenuation of the blood, the advantage of *frequent* sweating is too obvious to require much notice here. Let a horse, highly fed, have nothing but walking exercise for some time, and the first day he is made to perspire his sweat will lather like soap suds. The second day that lather will be much thinner, and the third the perspiration will run off him as clear as water.

That perspiration is the grand duct by which the impurities of nature are carried off, requires no argument of mine to shew; and so far from a horse being got into condition without frequent recourse to it, even a cock cannot be brought into the pit until he has gone through the operation of sweating. All those gentlemen jockeys who know what it is to waste to ride, have found the full effect of this grand relief of nature in the light and volatile feel which they experience after having lost three or four pounds weight in a walk in clothes, and a good smoking between the blankets afterwards. When they get up and are fresh dressed, they feel as if they could fly; and for my own part I have often envied the feel of a race horse walking back to his stable after having had a sweat.

Exclusively of the extreme debility and laxity of fibre produced by it, many serious evils frequently arise among hunters from a long respite from work in the winter, unless proper preventive measures are had recourse to. I am no friend to quacking, in either horses or men, when they are well. I remember the speech of the dying man:—"I was well, I wished to be better, and here I am," said one who attempted to mend a good constitution. Nevertheless, being exactly of Mr. Richard Lawrence's opinion, that inflammatory attacks are to be apprehended with horses in a state in which the constitution is preternaturally excited, preventive measures must be used to guard against them. In the summer, green food, moderate allowance of corn, and turning out at night, are cooling remedies always at hand; but not so in the winter: and I have

always been apprehensive of mischief in my stable after a long continued frost. The organs of respiration are the most likely to be affected, and many horses have become roarers during such a period. This is not confined to horses, for in the human species pulmonary complaints are always more frequent after a severe winter.

A few days after the breaking up of the frost at the latter end of 1822, a gentleman with whom I had a slight acquaintance was galloping by the side of me in some deep ground; and on hearing his mare more musical than she should be, and having been in the habit of seeing her go to hounds before the frost set in, I asked him how long she had been a roarer? He seemed surprised, as well as alarmed, at the question; but the next time I met him he admitted that the mischief was done.

This circumstance, although in corroboration of what I have advanced as to the evils attending long rest, without measures being taken to counteract them, was trifling in its consequences to another which I witnessed some years ago in Leicestershire. One of the most distinguished members of the Old Melton Club went to town at the commencement of a long frost, leaving in his stable sound and well perhaps the best hunter of that day in England. On his return, when the country was open, he ordered this horse to the covert's side, with another for himself, giving directions to his groom to ride him quietly after the hounds to prepare him for the next day. On coming to a check, after

some slow hunting, this celebrated sportsman observed to a friend, in a jocular manner, "here he comes, roaring away: who can he be?" Who was it but his own horse, which had become a roarer in the stable during the long-continued frost, and from no other apparent cause! Thus was a horse, worth at that time one thousand guineas, spoiled by doing nothing.

The instances which I have now mentioned are only two among many which I have met with of a similar kind; and I have always guarded against them in my own stable by precautionary measures---by lessening my horses' corn at least one feed per day; taking their beans from them; and invariably giving them a dose of physic, followed by a mild urine ball, if time will permit, or, what may be better, a few carrots chopped into their morning and evening feeds. Carrots have a particularly cooling property, and act as an alterative by the kidneys. Bran mashes, cold, are also useful, but they must not be too frequently given, as they are of a very lowering nature.

Although I object to the frequent use of bran mashes with horses that are to follow hounds, yet I have always made it a rule to give each horse one large lukewarm mash in the course of the week, taking care that he do not have it within two days of his turn to hunt. Bran mashes, made thin, expel the contents of the bowels without increasing the secretions, and are great preservatives of general health.

The following are what I take to be the chief

points on which the judgment of a groom is to be exercised:---To know when a horse becomes foul in his body; when he is up to his mark, and when he is below it; how to check incipient disease; how to treat horses that are not quite sound, so as to keep them on in their work; how to preserve their feet, and how to feed them. He should also know how to treat thorns, strains, common wounds and blows, which are perpetually happening to hunters' legs; but when any mischief of a more serious nature may occur, he ought, if he has his master's interest at heart, immediately to send off for the best veterinary surgeon in his neighbourhood; for when disease lies beyond the reach of manual detection, a groom (however clever he may be as a groom), if he attempts a cure, is travelling in a wilderness of error, and the expedients he may resort to may be worse than the original evil. I will here offer a few remarks on each of the above heads.

With respect to feeding---one of the first considerations---I believe I have said all that I conceived to be necessary on this subject at *p.* 83, to which I have nothing to add, but to remind my brother sportsmen of what I have before so strongly enforced, viz. *that food should be proportioned to work*, or plethora, the root of all evils, will be produced. "Plethora," says Boerhaave, "is created by everything that maketh a great quantity of good chyle and blood, and at the same time hindereth their attenuation, corruption, and perspiration, through the pores of the skin." This authority is

sufficient to enforce attention to the golden rule to to which I have just alluded.

A stint in the allowance of hay must be strictly enforced if we wish to preserve our horses to a good old age. We have heard of the *scelera aquarum* as applied to the human species, although *sportsmen* are not apt to be afflicted by such evils; but the mischief arising from an improper use of hay, I take to be *incalculable*. In the stables of the fast coaches this has been proved almost to demonstration. These horses are only allowed half a truss each for the seven days, and a broken-winded horse is now scarcely heard of among them. I have taken some pains to ascertain this fact by my own personal inquiries. One proprietor, who has nearly fifty horses at work---many of which are in as fast coaches as any that travel the road---assured me lately that he had not one broken-winded horse in his yard; whereas, before he stinted them in their hay, he generally had one in five in that state. A further proof of the good effect of this sumptuary law in the stable is, that the horse which lives chiefly upon corn requires less water than one whose belly is distended with hay; and it must make no small difference to a horse whether he be taken from an empty or a full rack, when put to a coach that *starts off*, and continues to run, at the quick rate of eleven or twelve miles in the hour.

Having, as before observed, had a good deal to do with private training (*p.* 92), I may be allowed to say that I consider the present system of feeding

the race horse to be very nearly applicable to that of feeding the hunter of the present day; and the trifling shade of difference between them exists only in reference to the work each has to perform. Here, however, the difference is much less than it was formerly; and may now be said rather to apply to the sort of horse we have to deal with than to the business he is put to. Strong and severe work is as necessary to the one as to the other: and to get a horse of a naturally hardy constitution quite fit to go to hounds, in some countries, requires that he should be nearly as much in training as if he were going to run a four-mile heat at King's Plate weights. The whole system of hunting is so revolutionized that the preparation which a horse now requires is very different to what it was in former times. The hour of meeting is seldom before eleven; the find generally quick and certain; and horses are often not more than five or six hours from their stables after the best day's sport; and the ground they go over is frequently not so much as a plating race horse performs in contending three or four-mile heats. Having said this, I see no reason to doubt the propriety of feeding, sweating, and muzzling the hunter much in the same manner as the race horse, only making due and proper allowance for the relative nature of their work; particularly as to not stripping the hunter too much of his flesh; or losing sight of the natural difference between the thorough-bred horse and the cock-tail.

It is my firm conviction that no less than nine

hunters out of ten that appear by the covert side---taking into account the present speed of hounds--are short of *quick work*, for the pace they are made to go; and let me impress one circumstance on the mind of the reader---*that, barring epidemic complaints and accidents, no horses enjoy such uninterrupted good health as those in training.*

LETTER VII.

TREATMENT OF HUNTERS IN THE SUMMER.

As the mariner at the expiration of one voyage repairs his bark for the next, so should the sportsman at the conclusion of one season set about getting his horses into good tune for the one which is to come. I shall, therefore, now proceed to state how I should recommend a hunter to be treated when the season is at an end---supposing him to finish it "sound, and well up to his mark."

The first step I should take would be to put him into a loose box, if convenient, and by degrees diminish his corn, giving him an hour's walking exercise every morning as usual. I should then give him two doses of physic, which would not only cool his habit of body so as to prevent the danger of inflammatory attacks, but would have that effect on his legs as to enable me to see what injury had been done to them in his work:---whether there were any ligamentary enlargements---any injury to the joints or sinews---any callous substances produced by blows---or, in short, *anything going wrong*. The clear state of his legs which this treatment will produce would prevent the possibility of working in the dark, as they will become *finer*, to use the language of grooms, in three weeks

than they would at the expiration of a three months' run at grass in the summer.

I cannot but be aware that I may in some degree be encroaching on the practice of the veterinary profession; but such is the esteem in which I hold that highly useful body of men---every *real* member of which is a treasure in the neighbourhood in which he resides---that so far from it being my wish to take a guinea out of their pockets, I should prefer putting one into them, or giving them any encouragement to which they are so justly entitled; and I have no hesitation in saying that it would answer to any sportsman who keeps hunters to call in the assistance of one of them to look over his stud at the end of every season, and to submit them to his treatment and superintendance during the summer months, which would repay him well in the end: for whatever may be the experience of a gentleman or his groom in such matters, the veterinary surgeon, from his anatomical knowledge of the animal, is enabled to see defects which are not observable by others, and to meet the danger before it becomes insurmountable. By way of illustration take the following example in my own stable.

A few years ago I had a remarkably clever grey horse, for which I gave 220 guineas. At the end of the season, when only six years old, he lost his action, and went like an old post-horse, being to all appearance groggy. With the most perfect feet and legs, and without a visible sign of anything wrong, I became alarmed, and could only account for it by supposing that I had given him a shake

at a leap with a considerable drop into a road which was hard, on the last day of hunting him. I determined, however, not to rely on my own judgment, and sent for the nearest veterinary surgeon of eminence in his profession (Mr. Samuel Palfrey), who was at first as much puzzled as I was; but, on a minute examination of his legs, he discovered two *incipient* splents, as they are termed, very little larger than peas, growing out just under the joints of the knees. These being removed by the operation of two mild blisters, the horse recovered his action, and my alarm was at an end.

Now it is very probable that had this horse been in the hands of a groom he might have been put to all kind of torture in the stable, or, what is more likely if in the possession of many persons, he would have been turned out to grass with the hopes of that being the *cartholicon* for all such cases, and with the assurance that he would come up sound at the expiration of his three months' run.

What, however, would have been the consequence? Why, the splents would have grown, though perhaps the lameness might have disappeared; and when the horse came into work again at the commencement of the next season, inflammation would have returned, and it would have been more than probable that half the season might have passed away before he could have appeared by a covert's side again. Here then is the old adage verified---" a stitch in time saves nine."

Indiscriminate blistering of hunters' legs has been generally resorted to previous to their being turned out, or thrown out of condition for the sum-

ner, under what I may venture to call the old system of management, now pretty nearly exploded. In my noviciate I followed this practice myself, and have since been an observer of it in the stables of others, but have long since pronounced it to be a waste of drugs, an unnecessary torture to the animal, and not once in twenty times of the smallest benefit. On the contrary, I have frequently seen it highly injurious, distending the vessels so much beyond their natural state as never to recover their proper tone again: and, indeed, this is almost certain to be the case if applied when any active inflammation is going on in the limb. My experience, indeed, has led me to place but little faith in blisters to horses' legs, unless the injury to which they are applied has been of very short duration. As to their reducing callous substances and obstinate splents and curbs, to which they are too often ignorantly applied, a sponge with cold water is equally effective, and divested of the torture. As, preparatory to firing, in some particular cases, and in all those of incipient excrescences of bone---such as splents, curbs, and *bone spavins, just budding*---the timely application of a blister will nine times out of ten effect a cure; and when to these you add their use in diverting inflammatory attacks of lungs, bowels, eyes, and feet, when applied externally to the body, you close the catalogue of their virtues---by no means a scanty one.

The following is the most effectual method of blistering, when the occasion for it is serious:---Let it be applied, without any corrosive matter in it, in good time in the morning; and early on the

following day let the leg be washed in warm water with soft soap, and the blister repeated. A liberal allowance of water, with two ounces of nitre, or a very mild urine ball, will be found safe and efficacious during the operation.

For injuries to horses' legs when they are serious or of long standing, firing, with time, is my favorite remedy. I must here make one observation; and that is, that I have ever been sparing of punishment to horses when it could be avoided, not only on the score of humanity, but from a natural regard which I have always had for so noble an animal. I must take heed, therefore, how I speak of firing a horse being a "favorite remedy" with me, or I may have some canting moralist on my back, and be set down for the greater brute of the two.

Perhaps there are few sportsmen who arrive at a good old age without having themselves experienced the *potential* cautery. When applied to a horse's leg it is called the *actual* cautery, being administered in the form of a red-hot iron. In both cases the operation is severe; but the impression on my mind is, that horses suffer more by severe blistering than they do by firing. In the first place, when fired, they are unconscious of what is being done to them, and, in the next, they are so alarmed by being thrown down and confined, and are so exhausted by struggling, that I do not think they feel near so much as might be apprehended.

In April 1822 I had a hunter of mine fired in both his fore-legs. Previously to the operation he

was blistered as I wished---besides strengthening his legs, which appeared about to give way---to reduce a callous substance that had formed on one of his tendons. Being of an irritable temper in the stable, he suffered much by the blistering, and was so uneasy that I was obliged to have a man to stand at his head with a small switch in his hand, for six hours, to prevent his rubbing one leg against the other, by which he would have blemished himself. When ready for the operation I sent him to be fired, with orders to my servant to lead him gently home afterwards. Being a resolute horse he struggled much on being thrown, but when down and secured he did not appear to feel anything. When he got up, and his head turned towards home, he was so full of play that the servant was obliged to ride him, or he would have broken away from him on the road. The same operator fired another hunter for me the following week for a young ringbone. He merely put a twitch on his nose, and *he never stirred a foot from the ground*. The consequences of these operations were, that the ringbone on one horse was stopped in its progress to lameness; and the enlargement on the tendon of the other, although of more than twelve months' standing, quite disappeared, and his legs all in place again. Now all the blistering ointment that ever was made would not have effected one of those cures, if it had the other: and with respect to the relative suffering caused by the operations of blistering and firing, I have only to observe that the effect of firing is merely local, whereas the anguish of a severe blister deranges the whole system, and often pro-

duces strangury and other spasmodic affections. I shall conclude this part of my subject by observing that I have never fired a horse when I thought other means would answer the end; but I would do it on the principle that I would go to a dentist and have a tooth drawn, rather than suffer protracted pain and illness from temporary or palliative measures. The operation in both cases is severe, but soon over; and I shall never think we are debarred of inflicting a certain degree of pain on animals given to us for their services, if those services cannot be available on other terms.

Having given the hunter his physic, and the liberty of a loose box, his legs will be reduced as nearly to a state of nature as can be expected after what they have gone through, or after the injuries they may have received. If no ligamentary enlargements, or callous substances on the sinews or on the tendons, should appear, a man may congratulate himself that his horse has been so fortunate as to escape them, and his legs may go on for another year; but they should be minutely inspected, and by one who knows the evils when he sees them (no mean accomplishment), and, having found them, circumstances alone must direct us to which of the two remedies must be applied. If blistering will reach the cause, it has certainly the reputation of being the milder operation of the two; but if the injury is considerable, the parts where it exists material, and of more than one or two months' standing, nothing but the actual cautery can be depended on. With those horses which carry high weights firing is too often a *sine qua non;* for when

once nature gives way under such circumstances, nothing short of so violent a remedy will restore the injured parts. Curbs, splents, and, above all, blows on the legs, are frequently very obstinate to deal with, often requiring repeated blisters, followed by firing, to get rid of them.

With respect to horses' feet in the summer, there are two opinions amongst good judges as to whether the fore shoes should be on or not—the hoofs, in the latter case, being often rasped around the toe to prevent them chipping or splitting. For my own part I prefer the tip, or half shoe, leaving the frog to press on the ground. A few nails around the front of the hoof cannot be injurious provided the heel be left free from them. If a horse's foot is inclined to become convex, or pumice, then he should go without his shoes, on the same principle as the inside of the blacksmith's hand becomes hard by the constant use of his hammer. I had a fine hunter with this sort of feet, which I restored to their proper form by making him stand on flags all day for three months in succession. The internal part of the foot, which had, as it were, dropped from its proper place, was forced back to it again, and the disease, if I may call it such, did not return.

LETTER VIII.

HARD MEAT *versus* GRASS.—PHYSIC.

FROM the experience of graziers and butchers, as well as by the reports of the meat markets, we find that the present summer [1823]---if "summer" it can be termed---has been particularly unfavorable to the beasts of the field, and consequently to those hunters which have been managed under the old, and perhaps too common, system of a three months' run at grass; and, as there is nothing like *proof*, I satisfied myself of the truth of what I have asserted in the following manner:---Knowing that a neighbour of mine had his hunters out, as usual, I rode to his house to see them; and wishing to put matters to the test, I took a horse of my own with me that had been summered, if I may use such a word, nearly, though not exactly, according to the method I have recommended, and I will state the result in detail. My horse had had two doses of physic since the last season, was not turned out till the first week in June, and then only at night, on a third year's lea which had been closely fed down in the spring. During the bad weather he lay in at night, and was turned out at four in the morning, taken up at ten A. M., and out again at five in the evening till nine, when he was housed for the night. When only out

at night he had a small portion of hay in the middle of the day, and two feeds of oats, to which were added, as the weather was cold, during the rest of the time he was out, a double handful of beans, not split, in each feed. When in the stable, by day, he was exposed to great circulation of air, as the casements were taken out of the windows and the door open. My neighbour's horses, seven in number, had been turned out as soon as hunting was over into a field of eight acres of tolerably good land, always used for the purpose, with plenty of shade and water, and had had no physic since the commencement of the last season. Himself and his groom entered the field with me, and I was much struck with the sad appearance of the horses. The "*qui color albus erat nunc est contrarius albo*" might have been aptly applied here. There were two grey horses in the field, but there was very little white about them. The black horse was anything but black, the chesnut a kind of dun, and the bay horses presented a kind of sickly compound of red and yellow, which it is not in my power to define. There was no reflection of the solar rays on their skins, and they had altogether a miserable appearance. Three out of the seven had coughs, their crests were low, their bellies large, and their action feeble.

On my remarking to the owner of these horses how ill they looked, he observed, that they did very well in that field last year, and that they came up in what he called "very good condition."—"That is very possible," said I, "because last summer was one of an hundred. The grass was roasted till it

resembled hay, but now your horses are starved." ---" How can that be," replied my friend, " when there is so much grass?"---" That there is grass," replied I, " I admit; that is to say, in places under the shade of trees and in wet spots, which they will eat, as you or I would eat a dog or a cat when starving: but they would as soon eat the fungus that grows amongst it as touch it now; and where the feed is sweet, you perceive they have gnawed it until there is no bite left to support so large an animal as a horse, and particularly one whose appetite was a short time since satiated with high keep." I now remarked to him the difference between my horse and any one of his seven. The coat of my horse was of its original colour, and lay close to his back: he was full of vigour and strength, rather fatter than I wished to see him; but dirty as he was---having been only taken up the day before (the 10th of July)---we could see a gloss down his quarters and shoulders, and his flesh was as firm as if he had been in work. He had no cough, but appeared in *perfect* health; and, by way of experiment, I rode him rather fast for about a mile and a half on my own road home, to see whether he would perspire quickly, which he did not, though full of glee, and eager to get home, and, as it happened on that day, under a hot mid-day sun.

Now let us contrast, if they can be contrasted, the advantages and disadvantages of these two plans, and balance the account between them. It is true that my neighbour's horses will have cost nothing but the value of about an acre of ground to each horse from the period of their being turned out until they

are taken into the stable again; and mine, supposing him to have consumed his acre of grass, and to have had his two feeds of corn a-day, since the time the others were deprived of it, will have cost, in addition, 144 quarterns, or nine bushels of oats, and about one and a half of beans, the expense of which does not amount to more than two pounds. Now we will suppose, for the sake of argument, that necessity required that either one of my friend's horses, or my own, were to have been exposed for sale in a week from the time the comparison was made---what, may I ask, would have been the result? Why, I will venture to assert without fear of contradiction, that as two gentle sweats and some good wisping would have made my horse look nearly as well as when in work, he would have produced an addition of twenty-five per cent. on his value beyond that of my neighbour's; and therefore, supposing them to be each worth 100*l.* when in condition, he would have paid 25*l.* for having eaten a twelfth part of that value in corn.

We may look at it in another light. If the condition of my horse, by the superior firmness of his flesh, and his increased vigour, be so much better in the month of July or August, how much better still must it be in the month of November, when he will be called upon to follow hounds---particularly so, when in the interval he has to go through that wonderful process of nature, the change of his natural covering, or coat, which so visibly affects him! Were a man told that he must write a book, or build a house, in three months, would he do either so well as if he had a longer

period allowed him to arrange and consider the subject for the one, or to select and season the materials for the other? This applies still more powerfully to the horse, inasmuch as all operations of nature require a stated time.

As I was returning home from inspecting my neighbour's hunters, I was amused as well as instructed by the following conversation, which took place between one of his tenants (a farmer) and myself:---" Mr. ------'s horses," said I, " look badly." " Why, yes," said the farmer; " I told the 'Squire so some time back; but I don't hold with the way in which some of you gentlemen keep your hunters. You keep them in a warm stable, full of good corn, for eight months in the year, and then turn them out to shift for themselves the other four. Now," added he, " this is not the way I like to keep my cart horses. I like to keep them pretty well all the year around; for if they are kept *up and down* (verbatim), there is sure to be something the matter with them---grease, or some humours." These were precisely his words, and I registered them carefully in my recollection; for nothing can be more true than that the greatest evils arise to horses from subjecting them to extremes of food, as also of heat and cold. Philosophers tell us that if this globe were to experience, in the space of one year, the heat of the torrid and the cold of the frigid zones---which it undoubtedly would do were the elliptic to make an angle of twenty degrees more than it does with the equinoctial line---three parts of it would be uninhabitable, as *neither plant nor animal could sustain the two extremes!* With

reference, then, to the unnatural condition of horses, and the unnatural purposes to which we apply them, the more consideration I give to the subject, and the more my experience teaches me, the more I am convinced that, with few exceptions, the stable is the place for hunters; and that subjecting them to sudden changes of diet, and to the vicissitudes of this uncertain climate, is productive, or at least the predisposing cause, of nine-tenths of the diseases and evils (to say nothing of accidents) which happen to them: and were I to be told that I were to receive a good annuity subject to the life of a horse, I would keep him in the stable all the year, as the most likely means, with proper exercise and grooming, of preserving him to a good old age. I have been more confirmed in this opinion by conversation I have had at different times with officers of dragoon regiments, on the numerous diseases---glanders in particular---to which troop horses are liable; and I have generally found them to proceed from the following causes ---namely, bad grooming, want of physic, to their only being what may be termed "half in condition," and, under all these unfavorable circumstances, to their being exposed to the vicissitudes of weather, and sudden transitions from heat to cold and from cold to heat. In perusing a treatise on glanders, written very ably by a Mr. Smith, late Veterinary Surgeon to the 2d Dragoon Guards, I was forcibly struck with the propriety and truth of the following remark:---"How the animal economy," says he, "is affected by such alterations of temperature and constitution of the atmosphere will

readily appear, if we consider that all animals have a standard of heat which is necessary to be maintained for the preservation of health. Of course all deviations from this standard must affect the system *according to the degree or duration of its application;* and as they have a power of resisting everything that has a tendency either to augment or impair this common standard, when the animal is placed in a degree of heat above it, the power of generating cold will be excited to preserve the natural temperature of the body; and when exposed to a degree of cold below the natural standard, the power of generating heat will be excited to maintain the natural temperature of heat. Therefore, when the animal is placed under such circumstances the constitution has two powers to contend with, which, though salutary and refreshing when duly proportioned, yet, when carried to excess, threaten its dissolution. Although it may be more fatiguing to the constitution to oppose heat than cold, yet, *when exhausted by its influence*, it is more susceptible to the impressions of cold; and, when enfeebled by any cause, as disease, *labour*, &c. is more liable to be injured by the alternate influence of either. Therefore," he adds, "when horses stand exposed to the influence of the sun throughout the day, the action of the heart and arteries is increased, and the blood forced to the extremities with great velocity, the minute vessels are distended, and their power so much exhausted that when the air becomes cold and dense in the evening their functions are either suspended or destroyed. Hence," continues Mr. Smith, "arises the first stage of glanders, which

disease, for once that it is produced by infection, is," he thinks, "ninety-nine times to be attributed to sudden transitions from heat to cold."

Now although, fortunately for those who turn out their hunters, they are generally taken up again before the most trying period to the constitution arrives---namely, August or September, when hot days are succeeded by chilling fogs at night---yet I think we may venture to assume that those horses must be foaled for the purpose, and made of more than common materials, which could submit with impunity to having their saddles and bridles taken off *as soon as they come home*, and turned out into a field to roll themselves in the dirt, and fill their empty and debilitated stomachs with cold spring water*!

Although "among a multitude of proofs one does the business," and one would satisfy me as well as a hundred, yet, having others to convince, I thought I would submit the propriety of turning hunters out to grass for the summer to one more test; so, the morning after I had seen my neighbour's horses, I got upon my hack, and rode to a park some miles distant, where I knew some hunters were turned out, and where they were charged five shillings a week for their keep, from the supe-

* "One great source of disease in horses is the improper treatment of them after they have been heated by exercise and hard labour. For though they come in covered with sweat, they are often exposed to the cold air uncovered, while their legs and thighs are washed with cold water, and not unfrequently they are allowed to drink freely of cold water. Hence arise inflammation of the lungs, bowels, or other internal parts, colds, chills," &c. &c.—See *White's Vet. Dict. p.* 190.

rior character of the pasture. Had I entertained any doubts, however trifling, on the disadvantages of a summer's run, my visit to this park would have dissipated them all: but I had here a particularly favorable opportunity of selecting one subject out of several that I met with, either of which would have been sufficient with which to illustrate the solidity of my argument; and this was a chesnut mare, the property of a gentleman who had sent her twenty miles to run in this park. Now it so happened, that, as I was riding along the turnpike road, the second week in May, I met this mare on her road to this park. Having ridden in the same race with her for some Hunter's Stakes about three weeks before, I had observed that she was looking remarkably blooming and well, and when I met her in the road she was but little altered in her condition. Her crest was up, her muscles hard, her legs quite in place, her eye was lively, and her skin was beautiful. When I saw the same mare in the park, *only nine weeks after I had seen her on her road thither*, I knew her, undoubtedly because I expected to find her, but had I met her anywhere else I certainly should not have taken her for the same animal. Her crest was gone, her carcase was swollen, her eye was dull, her action was languid, and her colour, from having been an excellent chesnut, was become (for I can compare it to nothing else) like that of half-baked gingerbread, without the smallest gloss on her coat, which lay hollow on her back; and, to sum up all, she looked as if she were rotten.

Now it is by no means my intention to imply

that this mare was rotten, but I only wish to enforce the striking contrast between her former and present appearance; but of this, however, I will not only pledge my existence, but, what would be worse than the loss of life, I will consent to be condemned to live upon horse-flesh the rest of my days, if this mare, by any skill of her groom, by any art, save that of magic, *can be reinstated in the condition in which she was when I met her in the road, until hunting is over the ensuing season.* I should here observe that the rest of the horses in this park looked equally bad as the mare I have been speaking of.

In my rides about the country in the month of May 1823, I met two other hunters on their road to grass for the summer. I asked the servant who was leading them whither he was taking them? He answered, to a tenant of his master's, who always summered them for him in his meadows. "Is it not a pity," said I, "to turn them out now they are in such fine condition, and their legs appear so good?"---"Oh, no," said the man, "it will do them a deal of good."---"Are *you* quite well in health?" said I. Not knowing the drift of my question, John smiled, but made no reply. "Have you any bodily complaint?"---"None, Sir," was his reply. "Would you wish to be better than you are?" He said he should not. "Then," replied I, "you should have persuaded your master to have kept his horses at home, which would have saved you and him a great deal of trouble between this and Christmas."

In corroboration of the hard-meat system, I

was particularly struck with an observation of the Earl of Darlington, respecting the horses of some officers of a light dragoon regiment who hunted with his hounds in the Raby country. "I know not how it is," said his Lordship, "but no expense or trouble is spared with my hunters, and my stables are excellent; but none of them look like these officers' horses." Now, as far as my experience has led me, I have never had reason to think that officers' horses in general were well groomed. On the contrary, their being called upon at all hours, and the almost constant access to barrack stables, must be much against them; but these minor evils are light in the scale against a long continuance of good hard meat and pretty regular exercise.

If we convince a man against his will, we are told that we do nothing, for he immediately relapses to his former opinions. This reminds me of a passage in Cicero, when writing on the immortality of the soul:—"I know not how it is," says he, "but when I read I assent; but when I put away the book, and begin to think on the subject, all that assent vanishes." So much for the effect of prejudice in a mind so highly cultivated as his! How, then, can we wonder at its taking still stronger hold on many of us less favored mortals? Cicero, however, could not satisfy himself by experiment; but we can: and let me conclude this part of my subject with the exhortation to every sportsman who rides hard, and wishes to be carried well over a country, never to let his horses get out of what is called "good hard meat"—the only ground-work

of condition. It may be asked, would I work them in summer? Certainly not; but of the two extremes I have no hesitation in saying that gentle work, with corn, is better for a hunter than no work without corn, for reasons which I have before shewn.

Having mentioned in a former Letter (*p.* 49) that I should have something more to say on physic, I conceive the present to be the most proper time for communicating it. It is true that in strengthening and augmenting the capacities of the body beyond their ordinary powers, whether in a man or a horse, the evacuating process is always had recourse to; but, before we apply our theory, we should be acquainted with the constitution of the subject to be operated upon; neither must we lose sight of local circumstances and exceptions.

I was once flogged at school for making a rule absolute when it was not so, and I have never forgotten the lesson. Notwithstanding this, I am one of those who for some years of my life submitted to the practice of my groom to give my horses three doses of physic in succession at the commencement of their being what is called "got into condition for work;" and I am almost ashamed to add, that, without taking the trouble to give it a moment's consideration, I was led to join with him in his creed that less would not do, *for the two first stirred up the humours, and the last carried them off!* My better judgment at length convinced me that this practice was an erroneous one, often productive of serious mischief, and by no means to be made general. Common sense might at first dictate to us, in these words---"If your horse be well,

why physic him at all?" Experience, however, has proved to us, that, to guard against the preternatural excitement produced by high keep and strong work, a sort of periodical evacuation of the system by the bowels is necessary to preserve the health, if not the life of a horse, as repletion would be almost invariably the consequence; but why these three doses are to be hurried indiscriminately through *every* horse that is to be prepared for hunting, in the month of July or August, I have yet to learn: and what led me to a serious and rational consideration of this subject, so as to doubt the propriety of the practice, was, first, the reason my groom generally gave me for it; and, secondly, its effect on my horses.

As for my groom's reasons for these three doses in a fortnight, the only effect they had upon me, when I took the trouble to consider them, was to make me smile at their absurdity, and to banish them from my mind with the contempt they merited. The *effect*, however, of these three doses of strong physic afforded a salutary hint, which I did not so soon lose sight of. At the expiration of the third dose I always found a urine ball, or, perhaps two, were to be given to get rid of a fulness of the legs, which was said to be always produced by physic. "Indeed, then," said I, "are the means to which we resort to strengthen the nervous system, and to prepare it for severe exertion, productive of a contrary effect? Are we bringing on debility, of which swelling of the legs is the most infallible proof, by means intended to produce the opposite effect? Something must be wrong here, and we must endeavour to alter it."

The effect of medicine on horses is only very lately thoroughly understood; and when we look back into old writers on farriery, we are as much astonished that more horses were not killed by some of their cathartic drenches, as that any of them were cured by some of their absurd nostrums. There is an admirable hit at these ignoramuses in Bucklaw's recipe for a strain, in the *Tales of my Landlord*. "Take," says he, "a fat sucking mastiff; flay and bowel him, stuff him full of black and grey snails, roast a reasonable time, and baste with oil of spikenard, saffron, cinnamon, and honey, anoint with the dripping, working it in." After all there is no great exaggeration in this. A relation of mine---a clergyman, educated at Eton and Oxford ---stood by and saw a country farrier give three pounds of shot and two ounces of gunpowder in a pint of milk, to a mare of his labouring under violent inflammation of the lungs, with great difficulty of breathing. About five minutes after she had taken it she staggered a few paces, and fell dead on the spot. My friend being a prudent man, I remonstrated with him on the impropriety of wasting so much powder and shot, as the twentieth part of the dose, in a more compressed form, would have produced more speedy relief.

At the period to which I allude, when I first directed my attention to the operation and effect of physic, I had a horse, to which I have before alluded, and which, as never having been what could be called a perfectly sound horse, but having stood fifteen years in my stable, with the exception of one winter's run, a model of condition, has been

a sort of landmark to me in directing the operations of my stable. This horse was in the habit of taking ten drachms of Barbadoes aloes and one drachm of calomel, in his three doses, in succession, and which appeared barely sufficient to produce the desired effect. Now I have good reason to believe that this horse had been in the habit of taking his ten drachms of aloes and his one drachm of calomel from the time he came out of training at five years old, and therefore less would not do; but for some years before he died he received all the benefit that could be derived from physic, by what I conceive to be not more than half the dose---namely, seven drachms of Barbadoes aloes, and no calomel. This alteration was effected by a better method of administering it. His bowels were relaxed the two preceding days by at least half a dozen *loose* bran mashes: he was kept *very short* of hay during this time, and set upon the muzzle at night; and he had a considerable portion of exercise on the day on which he took the ball, with as much tepid water as he would drink, before he felt nausea from the ball. Thus was the same effect produced from a much less powerful, and---as must be the case where drastic medicines are concerned ---also from a much less dangerous cause, and the constitution relieved from the powerful impression of mercury. The practice of physicking horses in this mild and rational manner is now so well understood that it is nearly disarmed of all apprehension of danger, which formerly attended it. Amongst the improvements, boiling the aloes is

a material one, much of the irritating nature of the drug being got rid of by that means. This, we must allow, is a great point gained, and no small consolation to those who have valuable studs of hunters and race horses, who so frequently have to go through this unnatural process.

When necessary, I am a great advocate for mercurial physic; but considerable caution is required during its operation, from the subtle nature of the drug. Though I have administered it very frequently, I never found any bad consequences to ensue, with proper care and attention; but I have known several instances of horses being lost from its effects through careless and unskilful management. It is the property of mercury to stimulate the whole secreting system more equably than any other medicine that we know of; and it is the only remedy to be depended upon to thoroughly cleanse and change a foul habit of body to a healthy one, by exciting action in the glands, and giving increased energy to the absorbents; but, if given in too large quantities, it weakens and exhausts by its too powerful impression. In the hands of a groom it is not always to be trusted; but in all cases of chronic cough, great disposition to foulness, farcy-humours or ulcers, and worms, it is, when judiciously applied, a safe, and the only effectual medicine. I confess I was once rather surprised to see some thorough-bred colts belonging to a friend of mine exposed to heavy rain

with a dose of mercurial physic then in operation ; but it was under the direction of a very eminent veterinary surgeon, who ordered it, and who said he would bear them harmless. The only way of guarding against cold is to be superior to its influence, which I conclude was the case with these colts running in a state of nature.

One of the advantages of the hard-meat system in the summer is the forward state in which we find a horse on the first day of August; and I name that day, because on or about that time hunters which have been altogether out for the summer are generally taken up. Instead of being that dropsical-looking animal, out of all form and shape, that a horse from grass is, he wants nothing but a sweat or two to put him, to all appearance, in place. His flesh, in which I include his muscles, is firm and elastic, and he has not that superfluous load of it, with a redundancy of blood, that good pastures create, and is therefore not so liable to those inflammatory complaints which so frequently attend a sudden change of diet. To a horse in this state I would never give more than two doses of physic *before* hunting commences, and those as mild as his constitution will admit. Circumstances must direct us when to administer another, which I shall allude to hereafter when writing on the duties and qualifications of a groom. Generally speaking, a hunter thus prepared will go on in his work until the first interruption from frost, when a third dose may be most beneficially administered

One of the principal auxiliaries to the condition of hunters is long-continued exercise, or what grooms call "keeping them out." A helper ---the lighter the better---should ride one horse and lead two, one on each side of him. I have never been fond of too much walking; for in this pace, as may be seen by the track of his footsteps, there is a great exertion of the hind leg of a horse, by which curbs and spavins are often occasioned. In the "jog trot," as it is termed, the hind leg falls short, and is comparatively in a state of ease. I have, therefore, always directed my groom, when travelling horses on the road, to trot them gently the greater part of the journey; and I recommend that pace to hunters at exercise, where the ground is not too hard or uneven. In the months of September and October they should go out early in the morning, on account of the bracing effects of the air, but always in clothes and hooded, and be kept out for three hours at a time. During these months the brush should be very sparingly used, it being the moulting season with them; and a damp hay-wisp is better, for obvious reasons. A few years since I saw a stud of hunters at Christmas, whose owner had not suffered a brush to be used to them up to that period, and their skins were particularly glossy and fine. It is difficult, however, to restrain grooms from the use of them, unless they are under lock and key, which was the case in this instance. When speaking of exercise, I should have observed that high

ground should be chosen for this purpose, if within easy reach, as wonderful benefit is derived from gentle work against a hill, and a great relief to legs. Add to this, the breathing a purer air is of no small advantage when the lungs are excited by action.

LETTER IX.

ON THE FOOT.

EXPERIMENTAL philosophy has been hard put to it in its researches into the foot of the horse. Indeed Nature herself seems to have exerted her very nicest art before she could form anything in the shape of animate substance capable of being hammered with the force of a sledge-hammer, and all this with impunity, for twenty years in succession. To accomplish this she has had recourse to all the art and power of mechanism ---to springs and cushions, pulleys and levers, and to every contrivance to prevent concussion in the *internal* parts of it; whilst the *outward* part is composed of a substance of all others the most suited to its purpose, being firm enough to bear the weight of the horse and his burthens, and admirably adapted to the adhesion of nails, by which shoes are affixed to it for its protection. Notwithstanding, however, the unrivalled excellence of the workmanship, it is too often unequal to the purposes to which we apply it; and the diseases and injuries of the feet of horses form a bane for which no antidote has hitherto been discovered, and which so frequently blast the hopes and expectations of the sportsman, who goes to bed at night in the belief that he has a horse in his stable worth five hundred

guineas, and when he gets up in the morning finds him not worth as many shillings.

What I have to say on this subject is the result of experience, never having seen a proper dissection and injection of the foot of a horse; and perhaps it is well for me that I have not---for I remember hearing my Lord Maynard declare that he had never had a happy moment since he had witnessed that operation; "for now," said his Lordship, "I expect my horses to be ruined every time they step over the sill of their stable door." From the numerous horses, however, that I have seen cut up in the boiling house, added to the great attention I have paid to the subject, I have, I think, a pretty correct idea of the form and construction of the horse's foot, and the causes of the diseases that attack it---I wish I could add that I were able to point out the cure.

It is, perhaps, presumptuous to say what may have been the intentions of the Creator. Might we be allowed to conjecture whether it were intended that the foot of a horse should be shod with iron, and that the horse should be driven or ridden on hard roads---from the adaptation of the parts my humble faculty supposes both; and yet we must express our surprise why so many ages should have passed over before such ends should have been effected; as, from what I have heard and read on the subject, there is no proof of shoeing horses, as we shoe them, being practised until the ninth century of the Christian æra; and we must admit that he was a bold man who first ventured to drive nails into the foot of a living horse. I may be told that

we have only negative proof of this, inasmuch as there is no mention of horses being shod with iron by any of the ancient writers on husbandry, horsemanship, or the veterinary art; neither is there any representation of horse-shoes in any of the remains of ancient sculpture, although the artists of antiquity were so minute in their designs as even not to omit a nail in the wheel of a carriage. No mention is made by their historians of shoeing-smiths or horse-shoes forming part of the *materiel* of an army; but we have numerous instances of their cavalry being obliged to halt on their march on account of their horses' hoofs being worn down and spoiled. On this account it was that they so much esteemed horses with hard feet. The Bible speaks of these, whose hoofs were "counted like flint;" and Homer and others, of "iron and brazen-footed horses, with loud sounding feet"---all which, with the *equi sonipides* of the Roman Poet, we may consider as poetical ornaments. That the ancients had a contrivance to protect their horses' feet, by a kind of sock fastened on them is certain; and to this day, in some eastern countries, these socks are used and sold to travellers by persons stationed for that purpose on their roads. We all remember---as a political event of some interest was attached to it---Vespasian's coachman stopping on the road to put shoes on his mules, which no doubt were shoes of this description. Indeed socks are now sold (1823), similar to what we may conclude these to have been, to be used when a hunter loses a shoe in the field. They are made to fasten under the flap of

the saddle till wanted; and, but for the weight of them (about 7lbs.), they would be a desirable appendage to a sportsman. They buckle around the fetlock joint, and the bottom of them is shod with iron*.

Shoeing horses is not now universally practised, as in many of the eastern countries they are still ridden bare-footed. It is most probable that the practice of shoeing became more general as gravel was used for roads; for, although paved roads were in use in very early times, they were not so injurious to feet as sharp flinty gravel. I have read that William the Conqueror introduced horse-shoes into England, and that Henry de Ferrers, who came over with him, got that surname because he was entrusted with the inspection of the farriers, and that his descendants still bear six horse-shoes in their arms. It is further added, that that Sovereign gave the town of Northampton to some person as a fief, in consideration of his paying a stated sum yearly for the shoeing of horses.

Nature is seldom defective in her work; but, without proper consideration, we might be induced to think that she had been so with respect to the hoofs of horses and the teeth of human beings. Before, however, we can substantiate this charge, we must prove that it was *intended* that horses

* Of the "horse-sandal or removable horse-shoe," invented by Mr. Percivall in 1830, that gentleman says, "I am not merely a reviver or restorer, but 'an original inventor,' since this is the first thing of its kind which has appeared before the public with any chance of success." The sandal consists of two parts: the *shoe*—the iron part, or that which defends the bottom of the foot and sustains the wear; and the *straps*, composed of web, whereby the shoe is fastened to the foot. It is not only light (*its weight not exceeding half a pound*) and conveniently portable, but strong and protective.

should carry heavy weight on their backs, or be driven at the rate we drive them on hard roads, or that human beings should eat and drink boiling-hot food; for I believe that the teeth of savages, in a state of nature, are said to last to the latest period of their lives. With regard to Europeans, it is certain that their teeth, generally speaking, do not endure half their natural existence; and were it customary to ascertain the age of a man, as we do that of a horse, by looking into his mouth, we should generally find at the age of forty as great a lack of grinders as Sancho did in the jaws of his master after one of his renowned battles.

It cannot be denied that the treatment and diseases of horses' feet embrace a subject of the highest importance, not only to a sportsman, but to all who possess valuable studs for the common purposes of life. It is a subject on which I could write a volume---the result of observation and practice. Indeed, it may be said that enough has been written upon it already; and we must also admit that no small quantum of quackery and bookmaking has been the result. We have had shoes of all descriptions, some of which must excite a smile; and the short reign they had proved their inutility and folly. My experience, however, has led me to the following bold conclusions---first, that the original form of a horse's foot has nothing to do with his soundness; secondly, that contraction of the hoof is the effect, and not the cause of disease; thirdly, that unless Nature has done her part *effectually*, by forming the foot of good materials, all the art of Mr. Coleman and the whole

body of veterinary science is of no avail; and, lastly, when disease has once thoroughly taken possession of this delicately-formed organ, the boiler is the only remedy.

With respect to my first assertion, it would be as preposterous to say, that because a man may have a neat leg and foot, or an elegantly-turned hand, he were never to be attacked with gout or rheumatism in either of them, as to suppose, that because a horse may have a perfectly-formed foot he is never to be subject to disease. Much as I am an advocate for good shoeing, it would be equally preposterous to assert, that unless a horse be shod agreeably to one or two particular systems he is to become a cripple. When we consider how many various methods of shoeing are practised in different countries, we must be well aware that they cannot all be agreeable to nature; therefore we must conclude that shoeing is *not the chief consideration*, as, in spite of its very worst application, some horses continue sound in their feet for a great number of years, whilst others, shod by the first practitioners of the art, are irrecoverably lame before they have worn out a dozen sets of their orthodox shoes. The Sieur La Fosse enumerates no less than six diseases incident to the foot of the horse; and yet, compared with present knowledge, he seems to have been ignorant of the true anatomy of the parts he treats of, though we must give him credit for opening the way to future science. When, however, we consider the delicacy and intricacy of the structure, with all its various articulations, we cannot wonder at its not being perfectly compre-

hended at first sight. As under the roof of our parents we imbibe our first notion of things, it may be allowable to go back to such data. In my father's stable, although---from his principle of treating them, working them with a belly-full of grass in the summer, and of hay, good or bad, in the winter, with "abhorrence of physic"---every other horse in it was broken-winded, yet (and I was a close observer) I only remember *one* at all tender in his feet, though they were shod by a blacksmith who never heard of the principles of nature in his life---who never knew there were such things as bars in the foot of a horse, but who took his butteris and pared hoof and frog till he was tired, and then made a red-hot shoe* do the rest of the business! Let not the reader imagine that this was a system I approved of, for I think the good old gentleman had much luck on his side, and only mention it to shew that some horses attain their twentieth year---which several of his did---perfectly sound in their feet, though shod by a smith who violated all the principles of nature, save one---that is, he suffered the shoe to rest on the crust, which is the chief natural bearing of the horse.

* When the late celebrated Colonel Thornton kept fox-hounds in Yorkshire, he was extremely particular about the shoeing of his horses. Taking up one of their feet one day, he observed that a hot shoe had been applied to it. "Tell that rascal of a blacksmith," said he to his groom, "if he ever dares to apply a hot shoe to a horse's foot of mine again, I will apply one to his ——." (The reader must guess the rest.) A short time afterwards, as the Colonel was returning from hunting he caught poor Vulcan in the fatal act, when, galloping up to him, with the assistance of two of his whippers-in, he made good his promise, and stamped him *à posteriori* with the insignia of his profession. It is unnecessary to add that the actual cautery was in this case a sovereign remedy.

However lightly I may have now spoken on this subject, no man holds good shoeing to be more essential than myself; and, to prove what I assert, I some years since made myself acquainted with the operative part of preparing a horse's foot for his shoe with the drawing knife, under the tuition of a first-rate performer from the College. Having done so, I was ever afterwards enabled to direct those who shod my horses, and found the best effects from my instructions. In one instance, in particular, I found them of infinite advantage. I went to spend the summer months, a few years since, with a friend who resided in the interior of the principality of Wales; and conceiving that gentle exercise at that period would be serviceable to two valuable hunters I then possessed, I took them with me. Dreading the uncontrolled operation of the butteris in the hands of a Welch blacksmith, I took my drawing knife with me, and the first time my horses wanted shoeing I prepared their feet myself. Contrary to my expectation the Welchman approved of and profited by the example I set him; and, in a very few lessons, became a shoer on the principles of nature, which was also of no small importance to my friend, who had eight coach horses (seven greys and a piebald) in his stable at the time, which Messrs. Tattersall afterwards sold for him for as many hundred pounds.

Were I to purchase a horse at a large price I should certainly like to see him with a fine circular foot, sound and elastic frogs, and strongly-defined bars. I should like to see the hoof full in

the front, free from ribs or seams, and of a dark shining colour. But when I have seen all this, am I to imagine that I have got a horse whose feet are secure from disease? Am I to imagine that so long as I contrive to preserve this circular foot, these sound and elastic frogs, and these well-defined bars, I am to have a sound horse? Let me not take such "flattering unction" to my soul! No: this horse is liable to disease in his feet as well as another whose hoofs are narrow---whose heels are high---whose frogs never touch the ground---*provided Nature formed them in such a mould*, and also provided she formed them of good materials. If this were not the case, what would become of the mule, the donkey, and the Arabian? I could bring a hundred proofs of the truth of what I am now advancing, but will only state one or two at present.

In 1818 I heard of a very clever well-bred young horse, the property of a clergyman in Bedfordshire, that had gone well one day for half an hour with the Oakley hounds, when the country was very deep, and was to be sold for one hundred and thirty guineas. I went to see him for the purpose of purchasing him. But I must here enter a little into detail, for the sake of establishing one point.

On my arrival at this gentleman's residence he was on a visit to a friend, so that I only saw his horse in the stable; but, as he was expected at home early the next morning, I gave him the meeting at an appointed hour. On examining this horse's feet, previously to taking him out of his stall, I found them perfect. I had him trotted at the end of the bridle down hill, upon pavement, when he went

perfectly at his ease; and after riding him a short time I purchased him at the price stated, and had him led by a careful servant of my own into Leicestershire, at three easy days' journey of twenty miles each. The fifth day after he arrived I got on his back to ride him to covert, and found he was lame. Immediately mounting another horse I ordered my groom to get his shoe off, and to put his foot into warm water, supposing his lameness to proceed from some trifling cause. My horse, however, was never sound again; and *because I could not prove that he was lame before I became possessed of him*, I never saw a shilling of my money again.

Now I must here observe, that when I saw this horse on the morning previous to my purchasing him I thought he did not stand quite square on his fore-legs, but that he seemed to have one of them---the faulty one---a little more forward than the other. I observed it again when I saw him the next day, and mentioned it to his owner, who assured me that it was only caused by his looking over the side of his stall at another horse—adding, that as he had bred him he could answer for his never having been lame in his life. All this was very true. The horse never had been lame; but, at the time I am speaking of, incipient disease existed in his foot, and the travelling into Leicestershire produced inflammation and lameness. The veterinary surgeon who attended him declared, that if he wanted to make a drawing of the foot of the horse he should have been glad to have taken his for a model, so perfectly was it formed in all its parts and

features. On dissection, two years afterwards, all this fine form was obliterated, and a total derangement of the necessary organs of action presented itself. Neither all the skill of the College, nor all the art of the shoer, would have been of any avail here, so rapid was the progress of the disease.

The next is an instance *è contra*. Three years ago I heard of a horse, the property of a farmer near Gloucester, that had been going particularly well with Colonel Berkeley's and Mr. Hornyold's hounds, and was for sale; but though he was what we call "all over a hunter," no one would purchase him, because he had "small contracted feet," as they were denominated, and was "certain to be lame." His price was 150 guineas. Being at this time on a visit to Mr. Hornyold, I got on my hack the next morning, and rode to see him. I found him just as he had been described to me, with small feet, high heels, and frogs not within an inch of the ground; but, convinced of his soundness, I bought him for 150*l.* and sent him part of the road that evening into Warwickshire, with orders to my groom to give him a dose of physic previously to my riding him with the hounds. He, however, very soon attracted the eye of a celebrated sporting character in that country, who rides heavy, and who gave me the price of another good horse for him, in addition to what he cost me, and does me the honour to call him "Nimrod." He has never been at all lame, or even tender in his feet, nor would his owner take 500 guineas at this moment, if such a price were offered for him. I may here add that Hermit (*p.* 64), who was sold

for so large a price in Leicestershire, had very narrow heels with very small frogs, but was never lame from such causes in his life, and was most particularly good on the road. On talking over these matters lately with a friend of mine, who has been a great breeder of race horses, and has had much experience in others, he observed, "You remember my Currycomb colt! I never took such pains with any horse's feet in my life, as I did with his, to make them perfect, but he was never sound after four years old. My Zodiac horse, that I rode so many seasons, had very narrow feet, with scarcely any frogs at all, and never was lame in his life."

LETTER X

ON THE FOOT—IN CONTINUATION.

"It is absurd to suppose there are no final causes, because we do not see the efficient cause. The equality of three angles, of a triangle with two right angles, cannot be made to be, though there may be some other thing prior to it, without which it cannot be. My horse, which is lame, cannot be made lame, though there may be a cause for his being so:—there may be a nail in his foot."

PETWIN'S "*Letters on the Mind.*"

WE attempt in vain to account for some of the dispensations of Providence, but to *suffer* seems the natural attribute of mortality. The natural diseases, however, of horses are but few; and, in justice to humanity, it must be admitted that they, as well as others which owe their existence to man, have occupied their share of attention; and we cannot, without impeaching the mercy of the Creator, for a moment imagine that there are many diseases without their remedies. It is, however, a maxim in physic that to find out the disease *and its cause* is half the cure; though it often happens that the former is the more difficult point to accomplish.

I concluded my last letter with some observa-

tions on the foot of the horse, with a promise of continuing them in this. "When the ploughman took the helm," says the fable, "the gods left him to himself;" and I must be cautious how I enter into this field of art, or I may be compared to the man who set about learning animal economy by dissecting a statue. Nevertheless, as all knowledge is progressive, few practical sciences arrive at perfection until they become the objects of *general* inquiry; and therefore I may be allowed to contribute my mite to the fund. Experience often points out guides more certain than any theory, and one triumphant certainty is worth a thousand doubts. At all events *evidence* cannot cheat us, but, on the contrary, has that sovereign dominion over our minds, against which argument has no chance to contend.

Although it is well that every man should have some idea of the operations of nature, few have much knowledge of anatomy, unless intended for the medical or veterinary profession; but without its demonstrative evidence, all is doubt and uncertainty, and we go on, accounting for one thing by supposing another, until we exhaust every species of error. Find out the cause and remove it, and the effect ceases! Remove the film, and the sight is clear!

In searching for truth it is useless to expose former mistakes and errors: we should only look to well-established facts, and to the unexpected discoveries which present themselves. In my last letter on this subject I ventured to oppose the long-received opinion---an opinion emanating from the

highest* authority---that contraction of the foot was *a cause* of lameness, and, that unless the frog received pressure, disease, and consequently lameness, were the certain effects. Now, the natural consequence of this opinion has been the stumbling block I alluded to in shoeing, giving birth to the expansion shoe, the thin-heeled shoe, and the artificial frog, which have, in their turns, ruined many thousand horses. The reader may exclaim, "Surely this is bold language!" It may, I allow, appear presumptuous in an humble individual like myself to state my opinion in opposition to that of such a man as Mr. Coleman, to whom we are, after all, indebted for laying down the first real principles of veterinary science in this country; by whose means they have been conveyed to all parts of the kingdom; and to whom may be traced that light which has recently and generally been thrown on the art which he professes. We are all, however, wise after experience; and my experience has fully demonstrated that thick toes† and thin heels will lame the soundest horse that was ever foaled, *when*

* The Veterinary College.

† Mr. Coleman recommends shoes three times thicker at the toe than the heel. In fair play, however, to him and his followers, this disproportion has not been persisted in. Alluding to these shoes, Mr. Peall, professor of the *Dublin* Society, thus expresses himself: "Experience of many years has convinced me that no other principles of shoeing than those which Mr. Coleman has laid down are capable of preserving the foot of the horse from disease;" but at the end of the same chapter he informs us, that "the thin-heeled shoes recommended by the professor had been laid aside for some time at the London Veterinary College, from the experience of their inutility." We are indebted to Mr. Goodwin for this amusing extract; but *as it comes from Dublin* we must excuse all faults.

put to severe work, and that pressure on the frog is by no means essential to, or a wide circular hoof by no means a proof of, the soundness of the foot.

With respect to the first of these positions, I have often experienced a converse effect. I have more than once had a horse in training, whose sinews shewed some symptoms of giving way; when, on lowering the toe and raising the heel, those sinews have been relaxed, and the horse has gone on well in his work.

With regard to the frog, I am fully aware that Nature never furnished an animal with such an organ without appropriating to it some useful function; but, on a nicer examination of the foot of a horse than that which a living subject presents us with, it is very evident that the heels, and not the frog, form the first natural bearing for his weight; and, in a state of nature, the latter will not touch the ground on a level and hard surface until the crust of the former is worn down, as I have a hundred times witnessed in colts which have travelled a long distance barefooted. Add to this, that however well adapted the frog may be to act by *second* causes, and also to prevent injury to the parts beneath it, yet (speaking plainly), from the stuff it is made of, so highly elastic—when considered as a preventive of contraction—its powers of opposing horn and iron must be very feeble indeed.

As I shall, hereafter, offer some remarks on preparing the foot for the shoe, in which attention to the frog and its properties will not be overlooked, I shall now proceed to the important discovery to

which I alluded in my last, relating to the nature and seat of the disease called "founder, or groggy lameness"—a discovery which has hitherto never been noticed by veterinary writers, with the exception of one or two who have *lately* touched upon it. The reader will observe that it is a disease strictly confined to the fore feet; so that the last-mentioned organ, the frog, can have no *peculiar* relation to it, as that organ exercises its functions equally in all the feet.

Now the following is the manner in which I stumbled upon this (to me) new light in the veterinary horizon, in which I am much inclined to think there is still some twilight remaining, which the bright sunshine of knowledge and experience has yet to dispel. Happening to go to London the latter end of September 1823, I was requested by a friend in the country to purchase a hunter for him, for which purpose I went to the Bazaar. There I got into conversation with Mr. Turner, the head veterinary surgeon to this splendid establishment, and who also so well performed his part in the rostrum on the auction days. On my looking at the feet of some horses, and making some observations on them which were in unison with his ideas and practice, he entered freely into the subject, and at last spoke of "*the navicular disease*." Now it so happened (and here I must expose my ignorance), that though I knew there was such a joint in the foot as this, yet I was ignorant of its technical appellation*; and therefore was obliged to ask for

* I knew this bone by the name of the nut, or shuttle bone, and was also aware of the joint it formed with the flexor.

an explanation, which, in the most obliging and scientific manner, he instantly furnished me with; at the same time informing me that the discovery of this disease, *as the seat of founder*, was due to a brother of his, who practised the veterinary art at Croydon in Surrey.

Now I have heard and read a great deal about diseases of the foot. I have heard some attribute them to ossification of the cartilages; whilst I have heard others attribute them to contracted hoofs or diseased frogs. On the other hand, I have heard a keen sportsman declare he would give a hundred guineas if he could get a good running thrush into one of a favorite horse's fore feet, to make it as sound as the other, which had a thrush. I was myself convinced that contraction, or pressure on frogs, had nothing to do with lameness or soundness of the foot whatever, but I had never heard of the "navicular disease."

Being all for demonstration, when I can get it, and convinced that there are but two ways of obtaining knowledge---one from our own experience, and the other from the experience of others---I obtained from his brother an introduction to Mr. Turner, and waited on him at his residence at Croydon, where I found he was the son of an eminent practitioner of his art, and a highly respectable character, and was himself, though a young man, in full possession of all the veterinary practice of that populous and sporting country.

On my arrival at Croydon Mr. Turner was prepared with one dissection of the leg of a horse just killed, to shew me the original structure of the

interior of the foot; and with another denuded of hair and flesh, so as to enable him to point out to me the situation and office of the navicular bone and joint, wherein, he contends, the seat of the disease called "founder, or groggy lameness," is *invariably* to be seen; and by the very clear and able manner---suited to my capacity on such subjects---in which he unfolded the evidence necessary to establish the fact, I shall be able to detail it, I trust, in such language as may be intelligible to the reader, being similar to that in which it was conveyed to me.

The navicular bone has its derivation from the Latin word "*navis*," being supposed to resemble a boat; but, in my opinion, the old appellation of "shuttle bone" need not have been disturbed, as the resemblance here is the stronger of the two. By that wonderful organ---*the great flexor tendon of the leg*---passing immediately under this bone, and articulated with it, the joint called the "navicular joint" is formed. Immediately under this joint is the fatty or elastic frog, also one of the greatest curiosities in nature; and under that is the horny or elastic frog. It is also worthy of remark, that the navicular bone passes across the foot, from one side to the other, just above the centre of the frog, forming, as it were, a double joint with the pastern bone and the flexor tendon; thereby acting as an auxiliary supporter to the coffin bone, in receiving the weight from above. On this weight being received from the pastern, the navicular bone descends with the pressure, inclining backwards, conveying the weight to the fatty

frog, and thereby acting as a powerful spring to all that portion of the foot which is *posterior* to the coffin bone. On inspection of this joint, in its healthy state, the navicular bone (which forms the joint with the flexor tendon, by a corresponding convexity in the centre of the bone) presents an exquisitely polished surface, resembling a shell, though at the same time it is highly vascular, and has the power of secreting that phenomenon in animal economy, *synovia*, or joint oil, by which the parts are lubricated when in action.

Now it appears most clearly that there are two distinct causes for the disease of the navicular joint---one, from any effectual opposition it may meet with in its descent, as above described (and which descent, as it receives the weight *perpendicularly*, and not obliquely, as with the coffin bone, is essential to prevent concussion); and the other, by inflammation, which attacks the synovial membrane which lines the joint, and which may proceed from various causes; though I should imagine concussion, or jar to the foot, to be the principal one; notwithstanding, *to oppose concussion to a certain extent*, seems to be the principal intention of the parts in question.

From the information Mr. Turner was so kind as to afford me, and from the specimens he presented me with, I am enabled to form the following notions of the disease of the navicular joint:---First, inflammation attacks the membrane lining the joint, succeeded by a diminution of the synovia, and a general stoppage to the healthy secretion of the parts. The consequence of this is

increased friction, succeeded by abrasion of the delicate and highly sensible membranes of which they are composed. Secondly, absorption from the centre of the bone takes place, causing a hole in it very similar to that which we see in a carious tooth: and, lastly, a strong adhesion of the tendon to this hole, forming a disease the most prevalent, and at the same time the most formidable to which the horse is liable. In slight cases I found there had only been an absorption of the cartilage which covers the bone, without any loss of, or hole in, the bone itself, and then there was little or no adhesion of the tendon to the bone.

Now to all those who have experienced the painful and distressing effect of a small bone spavin in a horse, it must at once be obvious that to create action in a joint in the state above described must be the cause of excessive suffering to the animal; yet such is the case with all groggy horses.

Of the extreme sensibility of joints we need no further proof than to be told that the most trifling exposure of their cavities very often terminates fatally, by excessive irritation. Even bones cannot rest or move upon each other with impunity, but are protected by ligaments which surround their joints, and by a fine vascular membrane which lines their different cavities.

Whatever may be the credit due to Mr. Turner for his able and satisfactory researches into this dreadful disease, it is but just to observe that it has not *altogether* escaped the notice of others. Mr. Coleman, in all his publications, has never

reverted to this disease; though I understand that since his attention has been directed to it by Mr. Turner, he has admitted it. Mr. Goodwin did mention one instance of it in a late publication, in the case of a gentleman's hunter whose foot he dissected: but to Mr. Turner alone is the merit of establishing the incontrovertible fact of its being the *general seat of founder in the foot of the horse*. These gentlemen, however, speak of it as an individual instance; and it must be highly gratifying to Mr. Turner to find that eminent practitioner Mr. Goodwin (veterinary surgeon to his Majesty, and whose book I have perused with the greatest pleasure) stating, that "although this disease might have been previously known to exist in particular cases," (only one of which appears in his practice,) "it was not understood to be the general cause before Mr. Turner investigated the subject."

For my own part I hate a hovering faith, and would at any time ride a hundred miles rather than remain in doubt on a subject of this interesting nature. On my viewing Mr. Turner's specimens all scepticism vanished, but some curious reflections came across my mind. "Why," said I to myself, "do we take so many opinions upon trust, when we have ears to hear, and eyes to see, for ourselves? If this fact be established, what must after-ages think of those volumes of error that have gone forth to the world on a subject surely of no such impenetrable difficulty? or that one humble individual should have it in his power to say, that, after all the exertions of the veterinary body, not only has no cure been yet discovered, but no *real*

cause demonstrated, for *by far the most common disease* incident to the theme and subject of their inquiries and labours? As for contracted hoofs, I have already stated my opinion of them in terms which cannot be mistaken. They have no more to do with the *cause* of lameness than the pen I now hold in my hand. Among Mr. Turner's specimens is the most contracted foot I ever saw, for the heels fairly overlap each other, with no appearance of frog. It, however, carried an old horse quite sound to his dying day; but the navicular bone and joint are as sound as adamant. Had it been in the power of mere outward compression to have lamed a horse, this horse must have been lame; but this I do not believe to be the case, and I will state my reasons why.

Every part of the internal cavity of the foot which could be affected by pressure, being of an elastic nature, and no joint being within its immediate influence, contraction, from whatever cause it may proceed, cannot come on so rapidly but that the parts would adapt themselves to the change. How frequently are hind feet contracted—but when have we heard of lameness as the consequence? Should contraction arise from the mechanical effect of shoeing, which *must be progressive*, there is a still slighter chance, from the reason just stated, of disease being produced by it.

Were anything wanting to convince me that the seat of foot lameness is in the navicular joint, I should take my stand in the hinder hoof. This, it appears, never founders. But why, may I ask, does it not? The answer is---it does not receive

concussion sufficient to injure the navicular joint: it comes *obliquely*, and not perpendicularly, to the ground, as does the fore foot; neither does it support anything like the same quantity of weight.

Now, for the sake of argument, it may be asserted, that as, from the form of the animal, it was necessary that the fore legs should carry a greater proportion of the animal (say nothing of the rider) than the hinder ones, Nature has been deficient in not providing accordingly. To this I answer, that for all natural purposes she has provided; but not against going at the rate of twenty miles in the hour, with additional weight, and opposed to two of the hardest substances we have---iron and stone. It is "the pace that kills" here, as well as in other cases; and to the moderate pace at which horses in foreign countries are ridden (a fact universally allowed) is to be attributed the more general absence of foot lameness, and not to their clumsy method of shoeing, which I shall allude to hereafter. We may add to this, that the horses on the Continent are, for the most part, a different sort of horse to those used for the common purposes of life in this country; not that I mean to say the navicular disease is not sometimes found in our cart horses, as well as those of a superior breed, as has been demonstrated by Mr. Turner.

A groggy horse cannot be mistaken. From having been so much on "the road" my eye is quite familiar to them; and I know them when I see them standing in the stable. They stand in a position peculiar to themselves, leaning obliquely

backwards, as it were, to ease the fore feet, and trying to rest their weight more on the toe than on the heel. This would not be the case were the lameness produced by pressure on the cartilages, as then the impression would be general.

When some of my acquaintance, who may be said to have been great *foot*men as well as great horsemen all their lives, come to read what I have now written, they will, I think, be convinced that they have had a good deal of their trouble for nothing ---not but what I highly appreciate the value of an open and wide foot in a hunter, in keeping him above ground over a deep country, as I would draw out manure on tender land in a broad and not a narrow-wheel cart; but I allude to those whose anxiety has been so great to preserve open feet as a preventive of disease. To one friend of mine this particularly applies. He had a very valuable gig horse, which he never drove in the winter, *because* he said he had such narrow feet that he would certainly be a cripple, unless he passed the winter months in screw shoes, by means of which, I admit, his feet did appear to be somewhat wider at the heels when he came up in the spring, though they soon resumed their old shape. These narrow feet, however, never failed him, for the navicular bone was sound.

Now I have no doubt but this was the disease which "the ancients" (amongst whom I include the common farriers of the last century) termed "coffin lameness." As most of them are, fortunately (for horses), now in their own coffins, it is no harm to say that they could not have given a much stronger

proof of their ignorance; for, from the oblique direction of that bone, added to its being surrounded by, and embedded in, springs, its injury must be of rare occurrence.

When I say that injury to the navicular joint proceeds from concussion, are we not surprised that mischief is not done every time a man leaps his horse into a hard stony road? General rules, however, never apply to individual cases: and in no part of animal economy is there more variety than in the foot of the horse, not only as to its shape, but as to what it is made of. I have had horses whose feet have been very perfectly formed that could not go at all without their fore shoes; and I had one, which I sold to Mr. Lechmere Charlton for a large price, that carried me from the further end of Witchwood Forest in Oxfordshire, to Bourton on the Hill in Gloucestershire, a distance of at least eighteen miles, in two hours, without a fore shoe, and without the smallest injury to his foot, which was a narrow one—by the bye not a soft country to go over, and the shoe was off at the finish of a capital run, so that I know not what distance the horse might have gone barefooted.

I must now bring this letter to a conclusion, but shall resume the subject, it being, in my opinion, one of *the most interesting* that ever occupied the attention of a sportsman, as far as the stable is concerned. In the mean time it may not be amiss to observe, that as concussion appears likely to produce foot lameness, by peculiarly affecting the part I have been treating of, it should

be avoided as much as is consistent with absolute necessity for it, and valuable hunters should be kept off hard roads as much as it is possible to do so*. This applies merely to concussion.

Inflammation of the synovial membrane which lines the joint may arise from other causes, which it may be more difficult to describe. It may be well to observe, that suffering horses to go a long time without being shod, or removed, and thereby suffering the sole to become morbidly thick, may be one cause of inflammation, as offering too much resistance to the descent of the navicular joint. Standing long in the stable, and then suddenly called into action, is also very likely to derange these highly-sensible parts, as indeed it is the cause of various bodily complaints.

I have now only to observe, that were I to have a horse struck with foot-lameness I would send that horse to Mr. Turner, and say to him, "Here, Sir, is a patient for you: as you know his disease, you are the most likely man to cure him." I should then take my leave, wishing him all possible success in his profession, to which he appears eminently entitled. If he succeeds in his labours, and finds out *the cure*, as he has found out the disease, *he* will then have found "the basis for the

* On returning home from hunting with a friend of mine who was riding a horse he had purchased from me, and was trotting him at the rate of nine miles an hour on the high road, whilst I was riding by the side of it.—"Why," said I, "do you knock your horse's feet about in that way, when you can avoid it?" His answer was—"If they will not stand what he is now doing, he is not worth what I gave you for him." This was bad logic.

repose of his profession," which a brother member of it rather prematurely boasted of. Let him, however, persevere in his endeavours, and he will be sure of his reward. The words of the poet apply to us all: we know not what we can do till we try:—

—Quid ferre recusent;
Quid valeant humeri

LETTER XI.

CONDITION RESUMED.

As the latter end of July is the period when all hunters should be in the stable, I resume my remarks on "*Condition*," and shall continue them until I have concluded what I have to say on the subject. I make no apology for the minuteness of the detail, as I am well convinced the subject is one which will command the attention of my readers; and I am happy to be able to communicate the pleasing fact, that numbers of my brother sportsmen have adopted my system of summering the hunter, with the anticipation of the best results. I have also had an opportunity during a late excursion through some of the best hunting countries, of hearing of, or seeing, numerous studs of hunters summered in this manner, belonging to sportsmen of the very first order, who adopted it long before I put pen to paper on the subject. Among others I called on Mr. Weedon, the Earl of Plymouth's groom, whose opinion, as one of the best hunting grooms in England, I was anxious to obtain. I found that he carried the object of condition still further than I do, as he informed me that all those horses of his Lordship which were

flesh on their legs were walked out for an hour or two every morning during the summer. Mr. Weedon has lived fourteen years (reckoning from 1824) with Lord Plymouth; and to any one who has witnessed his Lordship's style of riding across a country, it must be evident, that, unless Mr. Weedon knew his business well, he would not have remained fourteen years at the head of perhaps one of the most valuable studs of hunters in England. Mr. W. is also a man of manners and education superior to the generality of persons filling situations similar to his own, which induced me to go several miles out of my road to see him.

There is always a delicacy between sportsmen, which forbids them prying into the stables of each other, at any period of the year; therefore I did not even express a wish to see Lord Plymouth's hunters (about seventeen in number), but called on Mr. Weedon at his residence, which is about a mile and a half from the Earl's seat in Worcestershire. It appeared he had never heard of NIMROD or his letters; but when we came to compare notes on the subject of condition of hunters, I could almost have persuaded myself that he had been the author of them, instead of myself---so exactly did our sentiments tally. With respect, however, to giving hunters walking exercise throughout the summer, he there goes a step beyond me; but on mature reflection I am convinced he is right. On talking the matter over, each of us referred to Mr. Potter, the Earl of Sefton's celebrated groom, who always adopted that plan, and to whose very superior condition I have before alluded. "When

horses are fresh and well on their legs," said Mr. Weedon, "the advantage of always keeping them going in this gentle way, is incalculable at the commencement of the season. It invigorates their whole frame, strengthens the muscles, preserves their bowels free, and keeps them from getting out of shape and form."

On conversing with Lord Molyneux, at Chester races, on Potter's stable management, his Lordship told me that he was now steward to his father, and of course had nothing to do with the horses; but we both agreed on the very superior form the Earl's hunters were in when he hunted Leicestershire; and, as I before observed, they were always walked out with the hounds in the summer. On my asking Lord Molyneux after the horse he called *Oxford*, he told me he was quite well, but had had a tremendous operation performed upon him by Mr. Walton, the veterinary surgeon at Liverpool, in consequence of a humour which had settled in his sheath, and which he attributed to his having been turned out to grass. I saw this very first-rate horse a short time afterwards in London, looking remarkably well; but I shall have occasion to speak of him again, when describing the celebrated Ditchley day with Lord Middleton's hounds when he hunted Warwickshire, and when Lord Molyneux rode this horse, and was *one of three* who saw it.

During my excursion I spent a day with Mr. Lockley, who has ever been celebrated for the condition of his horses; and knowing that he had a very favorite hunter, for which he had refused a

large sum of money, I had some curiosity to see how he was treated. I found him in his stall, out of which, with the exception of travelling into Leicestershire, and other hunting countries, he had not been for three years---not even into a loose box. He had been soiled for a fortnight on clover, which had let his carcase down a little; but in every other respect he was fit to go to hounds at a week's notice, and his groom had ridden him ten miles that morning on the road.

On my journey homewards I saw the Earl of Jersey's groom, and found his horses treated exactly in the same manner as Lord Plymouth's, with the exception of their not being ridden out. They were, night and day, in large loose places, with chains across the doors, which were open; and they were full of corn. I asked his groom, whom I have known many years---and a most excellent servant he is, and high in his master's confidence---whether he kept their shoes on or off? when he told me they wore half shoes, or tips, merely because they kept the stopping in their feet, by which means they were kept moist.

When on the subject of feet (though I have much more to say on that head as I proceed), and their treatment in the summer, I cannot pass over a passage I have met with in Mr. Goodwin's work, *On the Diseases of the Feet*, which I here transcribe. The situation Mr. Goodwin has so long held under his Majesty, as well as his reputation and experience, set all cavilling at defiance.

"I have invariably observed," says Mr. Goodwin, "where horses are turned out to grass during

the dry and hot summer months, that on bringing them up to be put into stable condition, their feet are in a much worse state than they were when they went out, dried up, and so hard and brittle, that, on the application of a tool to bring them into a form fit to receive a shoe, the horn breaks like a piece of glass, and all the naturally tough and elastic property is lost, so that it requires some months to remove the bad effects. If it is necessary that a horse should be put out of work during the hot and dry weather, I prefer a large box or shed, and soiling with green food; by which means two objects are gained---viz. all the *injurious* effects of a drying wind or a meridian sun on the hoofs are avoided, which creates such an excessive evaporation of the natural moisture absorbed into the horn from within, that it not only becomes dry, hard, and brittle, but the whole horny box tightens on the sensible parts, and frequently produces great mischief. But in a loose place moisture may be applied in any desirable way. The other advantage of a shed or box is, that horses are sheltered from the terrifying effects of flies and heat. Horses at grass are much inclined to thrushes; and whether they have shoes or tips, or are without either, it is necessary frequently to inspect their feet, and to remove all superfluous horn, otherwise the foot will grow out of all form."

I think I have now said enough of the evils attending summering hunters in the field; and I think the foregoing observations of Mr. Goodwin's will be an answer to all those who say "it is absolutely necessary for their feet." That they can

exist sound and well for fifteen years without it, my own experience has assured me; but the following well-authenticated fact out-herods Herod. The circumstance is thus related in the 8th vol. of the *Sporting Magazine*, *p.* 160:—"Lately died, at Barnstaple in Devonshire, a chesnut horse, in his 39th year. He was well known in many Hunts thirty years ago. The gentleman in whose possession he died, bought him at two years old, at which time he took him to house, and rode him, summer and winter, for between twenty and thirty years, *without ever turning him out*, and he died of an accident at last."

Philosophers will tell us, that there is a condition which is natural, and a condition which is not natural, to all bodies animate or inanimate, liquid or solid. So much for the operation of external causes! Now most men will admit that the natural condition of the *ass* is for the most part a sorry one, having more than his share of that *vis inertiæ* which keeps things in their places. *Internal* causes, however, operate with him most forcibly; and it is wonderful how this *vis inertiæ* is changed into a *vis vivida* by a plentiful allowance of good oats and beans. I beg pardon for introducing so mean an animal as this to the notice of the reader, when speaking of what relates to the horse, but time has been when this patient and better deserving slave was held in higher estimation*. In the former state, however, he suits my purpose best, though the question might be asked—what has an ass to

* It is somewhat singular that in the Decalogue we are commanded not to covet our neighbour's ass, but not a word is said about the horse.

do with the condition of the horse? My answer is, that the ass, when in condition, is so far *pro tempore* exalted in the scale of beings, as nearly to approach the horse; as the following anecdote will prove.

On my return from Epsom races on the Derby day (1824), my attention was attracted to what is vulgarly 'yclept a "donkey chaise," in which were a man and a woman of no small dimensions, going at a very rapid pace, and drawn by a small ass. Curiosity led me to follow them, when, as far as I could judge by the pace of my own horse, I found they were going at the rate of nine miles an hour on a very indifferent road. On being observed by a friend, he rode up to me and told me he had seen this humble vehicle on its way to the course in the morning give what is called the *go-by* to several carriages-and-four, and that he was equally struck with the extraordinary appearance and action of the animal. On my asking the owner of him a few questions about him, he informed me that he had done three miles in fifteen minutes with him on the road for a wager, and that he would back him to do it in less; at the same time giving me his address, when I found he was a blacksmith residing at Mitcham in Surrey. "Do you keep your ass on Mitcham Common?" said I, anticipating his answer. "Oh, no," replied the son of Vulcan, "he has never been out of my stable for three years, and he eats as good oats and beans as your horse does." —"It is accounted for," said I to my friend: so we pulled up our horses, and gave Neddy the road.

Before I finally take leave of the evils of summering horses at grass, I must be allowed one word

more. The reader will recollect my illustrating some of my arguments against it, by describing the state in which I saw seven hunters (*p.* 112) the property of one gentleman, at the conclusion of the last summer; and also one mare (*p.* 119) which I went to look at on purpose. I have now to add, that one of the eight horses died in the course of the winter, and six of the other seven were never in condition at all, and the mare died after the first good run she dropped into. In a pecuniary point of view, including accidents and all other casualties, I have no hesitation in asserting, that in the course of twenty years the bullock-feeding system of summering hunters shall be fifty per cent. against those who adopt it! As to accidents, they are as numerous as *unlooked for;* and I know not when I should have done enumerating them were I once to begin. At Chester races, a gentleman by the name of Purshouse, well known in Staffordshire as a good sportsman and a still better rider, came up to me, and said, "You remember my pigeon-eyed horse?"---"To be sure I do," replied I: "he was *a hunter*, and could carry weight well; and I have been often delighted to see you ride him across a country."---"I shall never do it again," added he; "for he is gone broken-winded. I turned him out to grass in the summer, when he used to amuse himself by galloping around his pasture till he was heated, and then lying down in a pond to cool himself. He did it too often, and inflammation of the lungs was the consequence."

During the season for physicking hunters, let

me strongly recommend all my brother sportsmen to caution their grooms against giving too strong doses to their horses, and to prepare them well by bran mashes. Misfortunes, they say, seldom come alone; and when at Chester races I was also informed of a sad mistake on this important subject, which had that week occurred in the stable of an old schoolfellow of mine, and a brilliant performer over a country, in the Cheshire Hunt, whose groom had given a horse of his *ten drachms of aloes*, without a sufficient preparation, and he was buried on the day I heard the story, having lately been purchased in Leicestershire for either three or four hundred guineas.---Another death by physic, occasioned by bad management, came to my ears a few weeks since. This was the case of a horse which I sold at two years old, and was now five. He was very promising for a hunter, and Mr. F. Holyoak was in treaty for him, when death put an end to everything.

I have before observed that I never lost, or had a horse in any danger, in physic; but with such horses as are at all apt to be griped it is desirable to give the dose overnight, as in that case the symptoms would shew themselves in the day time, when relief would be more readily administered. I shall, however, have much to say on this subject at another time.

LETTER XII.

PRECAUTIONS TO BE TAKEN IN THE MOULTING SEASON—SWEATING.

NATURE so delights in freshness that she will not suffer her creatures to wear their old clothes; and to the horse---no doubt her favorite---she has given two suits in the year---one in the spring and the other in the autumn. The periods alluded to---but particularly the autumnal one ---are the most trying of any to those kept in an artificial state---the constitution being by the law of nature more than commonly susceptible to morbid impressions. Thus it is, that, comparatively speaking, so few gentlemen's hunters *commence* the season in blooming condition; at least, it is one of the principal obstacles to that desirable end. People, in the warmth of their imagination, seldom advert to causes and effects; but the animal economy is affected in so many various and unlooked-for ways, that a groom, to be sure of his object, must ever be on the alert. He will soon find out there is no catholicon for getting horses into condition. He must investigate; he must reflect; he must exercise his reason, and make all the use of his common sense, if he has any.

The months of August and September is the usual season when horses which have lived well

begin to cast off their summer coats; and it is, or at least it ought to be, the period when those used for the purpose of hunting have gone through their course of physic. It is, however, too often the season in which injury is done to the coat of a hunter, which he does not get the better of till Christmas is past. I have before observed that no horse, or at any rate not more than one in a hundred, will be in blooming condition until he has (besides his physic) gone through a course of alteratives to sweeten and correct the acrimony of his blood, and in which alteratives there is always a portion of mercury. Now the difficulty is to give him this medicine, and to give him his work also, without injuring, or what in the stable is called "setting," his coat. Many persons, on this account, postpone sweating their hunters until the moulting season is gone by; but with proper treatment this precaution is not necessary, and the delay is fatal to the condition of their horses. The secret here merely consists in keeping them warm, particularly on the days they sweat, and thus avoiding a sudden constriction of the pores---more than usually susceptible by the diaphoretic properties of the medicine they are taking. Indeed I must go one step further, and assert, that if, at this trying season, a horse is exposed to a stream of cold air, after having had his blood vessels extended by exercise, and his skin relaxed by medicine, the bloom will be taken off him as effectually as if he had been turned out into a straw-yard for a week. The blush on the human face is scarcely more transient than the bloom on a horse's skin---so intimately connected are its

extreme and minute vessels with the vascular system at large. It may, indeed, so truly be called his complexion, that a man of observation, in the habit of daily inspecting his stable, can see with a glance of his eye if his horse is doing well or not. In the degrees of discernment, then, consists the merit or demerit of a groom; and even then, unless he knows the causes of effects---the why and the wherefore---all is still darkness.

As a fine genius is said to be a man at his highest perfection; and as, next to man and woman, the horse is the paragon of animals, so may we call him, when in the highest possible condition, the next fairest sample of a happy combination of nature and of art. The bow, however, must not always be bent. It was observed by Hippocrates that the health of man was most precarious when arrived at the highest pitch; and I am sure this may be applied to the horse. In this respect training grooms are, generally speaking, the best physiologists, and more awake to the sudden alterations which take place in those under their care; or, in the more humble language of the stable, *when a horse becomes foul.* Inasmuch, then, as prevention is preferable to remedies, is this a most important part of a groom's services to his master, as he may be the means of checking incipient disease.

There are progressive stages in all diseases; but those of an inflammatory nature, and to which horses in condition are most exposed, are often so active and decisive, that if we wait for directing symptoms we are lost. The progress of them is frequently, and indeed generally, so rapid, that

unless speedily arrested in their course, mortification, and consequently death, ensues. In many instances, however, Nature gives us timely notice, as in the case of the race horse in his work. The practice of his trainer is---after he has gone through his first preparation---to feed and to work him as long as his constitution supports him; and when Nature says "enough"---by his appetite failing him, and other symptoms which will be hereafter explained---he has physic, green meat, and rest, and then starts fresh again; or, in their more technical and not inexpressive language, "becomes free;" for they are well aware that, so long as the wheels of nature are clogged, the machine cannot proceed as it should do, and the whole system becomes deranged. Judging, therefore, by the rule of optics, is a most essential qualification in a groom.

The common appellation, then, given to this change in the animal economy of the horse is, that he is become foul; or, in other words, that his blood is vitiated and his system over-excited; nor can it be much better expressed. That he should become so, from the unnatural state of excitement in which he is kept, unless preternatural means be taken to correct it, is by no means to be wondered at; but as habit lessens the noxious influence of all changes in animal economy, and finally gets the better of Nature herself, we have nothing to fear if we are awake to impending circumstances. That such is the fact, has been pretty well ascertained by other animals as well as horses. The celebrated Mr. Abernethy procured a rabbit, six weeks old, and fed it with cabbage which had been grown upon flau-

nel, *sprinkled with distilled water:* the animal preserved its health as perfectly as if it had been running in a warren. The no less celebrated Dr. Fordyce enclosed in glasses, filled with common water, some gold and silver fish. He changed the water every three days, and without any other food the fish lived and thrived for fifteen months. He then exchanged this water for *distilled* water, and, to prevent the probability of insects getting access within the vessel, he closed it up carefully; but the fish grew and performed all their natural functions as perfectly as if they had been swimming in a pool. Either the Brahmin who lives entirely upon vegetables and water, or the Englishman who is carniverous and drinks brandy, must violate his nature; but we find each of them living to a good old age.

Now as relating to horses, there is little doubt, but that, as the blood is the mainspring of life, it is to the viscid and unhealthy state of it that this foulness of habit is to be attributed; but let not the reader imagine that high keep and warm stables are alone to bear the blame. No!---the derangement of this vital fluid is more often occasioned by poor, bad living, than by good; but the treatment in the one case is very different to the other, and in the latter much more difficult to succeed in. In the progress of human existence, indeed, I will venture to assert that for one case of disease arising *solely* from generous living, fifty may be traced to the want of it. Intemperance is nowhere to be commended; but "air, exercise, and *good nourishment*," said Sir Astley Cooper, in his lecture on scrofula at St. Thomas's Hospital, "are

the three great points to be attended to in the preservation of health. There is no other specific," adds he, "for the cure of this disorder, and he who says there is, attempts to gull mankind by the assertion of what is not true." For my own part, I have known many water-drinkers*, but I never could find out that they lived longer than wine drinkers, provided the latter kept within the bounds of moderation, and followed the sports of the field. "Drink no longer water, but use a little wine for thy stomach's sake," said Paul the Apostle, in his tender regard for his dear friend Timothy†. As we are now, however, speaking of horses in condition, I must confine myself to the effects of high, and not of low keep.

To preserve health the blood must be kept as nearly as possible in a state agreeably to the standard of health. If viscous or thick, it cannot pass as it should do through the finer vessels of the lungs. If serous, or watery, it is unequal to the functions of life. The due medium, then, must, if possible, be preserved, and this can only be done

* An excellent anecdote is on record of the great Chief Justice Mansfield. Probably with a view to prolong his own days, he was always anxious, when old witnesses were in Court, to know their customary habits of life. It so happened that two very old men by the name of *Elm* were one day the objects of his inquiry. "You are a very old man," said his Lordship to the elder brother; "I suppose you have lived a very temperate life."—"Never drank anything but water, my Lord," said Mr. Elm. "Nor you neither, I suppose," said the Judge, addressing himself to the younger brother. "When I could get nothing else, my Lord," was the reply. "I always took my glass with my friend."—"Well, then," replied his Lordship, "all that we can say is, *an elm will flourish, wet or dry.*"

† 1 *Tim.* v. 23.

by feeding, medicine, and work. The great object of condition in horses being to increase the living power, in how far this is to be effected without risking the health and life of the animal, consists the whole art of grooming. It remains, then, now to point out how and when a groom is to be aware that he is pushing this system beyond what nature, with all the precautions of art, will bear.

The distinguishing symptoms of foulness in a hunter are these :---He appears unwell without any specific disease. His mouth is hot, his eyes look dull, and sometimes yellow. His coat loses some of its usual gloss, and stares between the hip bones, and sometimes on the poll of the neck. His appetite frequently remains good; but he is more than usually anxious for his water. His heels are scurvy, and sometimes crack. He stales often, but a little at a time. His urine is highly coloured, and his excrements hard, and often covered with a slimy fluid. He is dull when at exercise, and frequently coughs without any appearance of having taken cold. He loses flesh, and looks dry in his skin. His legs and ears are often cold, the latter being frequently found wet after exercise, and sometimes deprived of part of their covering. His crest falls; the whole tone of his system appears relaxed; and, without his groom exactly knowing why, he is not the horse he was a week ago.

Bleeding (or what the grooms call "changing the blood") used to be the favorite system pursued in this case; but I have long since abolished bleeding in my stable, except in cases of inflamma-

tory attacks, or when horses have been over marked with hounds---in the former of which it cannot be done too speedily, or too copiously, so as not to reduce too much. Periodical bleeding was in former times considered essential to the health of man; but such symptoms of repletion and such motions were excited at the returning periods, as rendered the operation necessary even to preserve life.

Before we apply our theory we must consult the constitution of our horse, and also attend to circumstances. In all cases we may rest assured of one thing---viz. that from whatever cause any ill effect may proceed, that effect will never cease to shew itself until the cause which produces it be removed. In all common operations the operator is apt to look at the ultimate end of his work, without considering the intermediate steps which are to lead him to it; but this will not do in the stable. The operation of getting a horse into condition is so opposite to that which is purely mechanical, that circumstances are to be anticipated, as well as provided for, beyond what we first bargain for.

As there can be no condition without work, I am supposing that the symptoms before alluded to occur when horses are in full exercise. In the racing stable the most common plan pursued is, a dose of physic, some green meat, and a remission of work for a few days; and this generally restores them to their former strength and vigour. With hunters, however, one of these recipes---the green meat---is never to be exhibited when they are in

work, neither is it always convenient to give up the use of a horse for a period sufficient to enable him to go through a dose of physic with advantage. Alteratives alone must then be depended upon, and several are recommended for this purpose. The black balls sold by farriers, and generally used as alteratives, are merely composed of Castile soap, turpentine, and antimony---the latter of which I have before recommended, on my own experience, as one of the safest and best correctors of the acrimony of the blood with which we are acquainted; and without some such auxiliary to our common stable management I have ventured to assert that few horses can be brought into, and kept in, perfect condition.

Although the word *surfeit* may be considered an indefinite term, yet there is a species of foulness in the habit of our horses which comes under that denomination, and is produced by a sudden constriction of the pores of the skin, when exposed to a stream of cold air, after having been expanded by severe exercise. Here the blood is most materially affected, as the matter which should have been thrown off by perspiration is thrown back upon the circulation, and the whole mass of it is at once contaminated. The symptoms here cannot be mistaken, as they almost immediately shew themselves in the staring and unkind appearance of the coat---by a cough, swelling of the legs, or, in some instances, by a violent inflammation of the lungs, which comes on about the third or fourth day. In the mildest of these cases a change of the blood, or, more properly speaking, an alteration in the quality

of it, is absolutely necessary; but this must be the work of time.

On the first appearance of this change for the worse in the condition of a hunter, I have endeavored to stop its progress by giving him half a drachm of calomel with a drachm of emetic tartar over-night, and a dose of physic in the morning, and have several times succeeded in doing so. When time and circumstances would not admit of the calomel and physic, from a drachm to two drachms of tartar emetic, in half an ounce of cordial ball, may be given every other day for a week—taking especial care that more than common attention be paid to the horse whilst under the effect of the medicine, by keeping him warm, in and out of the stable; with plenty of leg rubbing, a bountiful supply of straw, and tepid water. Gentle exercise also at this time ---but not to create perspiration---is most material.

The effect of medicine upon horses has been only lately thoroughly understood; and although there is, certainly, a relative connection between animal and human medicine, yet their relative effects have been very much mistaken. When Mr. Taplin wrote his *Sporting Dictionary*, in which he professed to treat of the diseases of horses, the veterinary art in this country was only in its infancy, and therefore his authority had some weight. Being bred, and practising as, an apothecary, he was not aware of the vast difference between the internal structure of the stomach of a man and that of a horse, which naturally led him into a wilderness of error. Thus, when speaking of emetic tartar,

which I have no hesitation in pronouncing one of the safest and most efficacious medicines that can be employed in the stable, he tells us, "that it is the most powerful, and, in respect to horses, one of the most prostituted medicines in the whole *Materia Medica*, and is only introduced (in his book), and its properties described, that the sporting world may be sufficiently guarded against its dangerous effects!" This writer then proceeds to express surprise, that, as seven or eight grains will sometimes destroy a man, a horse should be expected to take twenty times that quantity with impunity! "Dead horses, however, any more than dead men," says the Doctor, "tell no tales;" which must have have been, no doubt, sometimes consoling to him in his two-fold profession. What would he have said to the large quantities of arsenic, and the two drachms of corrosive sublimate* at one dose, now given to horses as a tonic, and from which the best effects are experienced? The Doctor seems to have overlooked the good advice of Persius---"to say little on what we do not understand."

As almost all diseases of horses are of an inflammatory nature, the good or ill condition depends upon the pure or impure state of his blood; and which, as far as nature is concerned, can only be regulated, to a certain standard, by food and exercise. Allowing each of these to be administered to the best possible advantage, yet there is that disposition to change---generally leaning to plethora ---in the habit of all animals under preternatural

* See *White*, vol. ii.

excitement, that occasional evacuations by the bowels, or else a course of alteratives, are necessary every six weeks, or two months at farthest, to preserve them in uniform health. The evacuation I allude to is a light dose of physic, not exceeding six or six and a half drachms of Barbadoes aloes, with the bowels well prepared by from four to six bran mashes beforehand; and when I speak of alteratives, I mean those which induce a healthy action of the *bowels and skin* by their gradual and mild impression, and not those which act *strongly on the kidneys*, and are termed diuretics; to most of which, with hunters, I have the greatest possible objection, for reasons which I shall state hereafter. Alteratives, however, I must observe, are only expected to *preserve a horse in his condition;* for without physic not one in a hundred will ever arrive at his best; or, at least, remain so for the period for which his services are required.

In a former letter (*p.* 93) I have stated that I never had but one dead hunter dragged out of my stable, and that event was occasioned by a sudden collapsion of the pores, from standing still by a covert's side in rain whilst a fox was dug out, after a short burst of only twelve minutes, but just enough to do the mischief; neither do I recollect but two instances of dangerous inflammatory attacks, in both which cases the horses recovered and did well. In addition to this, I now declare that I never had a horse that went blind in my possession; I never had one that went broken-winded; I never had a horse suffer from worms; neither did I

ever experience lameness from thrushes, cracked heels, farcy, or what are vulgarly called humours. All this good fortune I attribute to three simple causes:---first, to never turning horses out, except in cases of accident; secondly, to give them plenty of exercise, generally bordering upon work; and thirdly, to never suffering them to go more than six weeks, or two months, *when in work*, without giving them either a dose of physic or alteratives, which, discharging by the skin, the bowels, or the kidneys, act sufficiently for my purpose.

I have before described what I consider the best method of physicking horses, in the progress of which I have never had an accident. I have always borne in my mind what I have learnt in conversation with veterinary surgeons, that, though the stomach of a horse be proverbially strong, yet the intestines through which the drugs have to pass are extremely delicate, and highly sensible to any thing of an acrimonious nature. The alterative I have chiefly made use of has been the common antimony of the shops, giving an ounce per day, for eight days in succession---with the occasional addition of a little yellow resin. When strong symptoms of foulness appear, and it is inconvenient to physic, I then prefer the emetic tartar as an alterative, which has lately become a very fashionable medicine in the stable, and certainly quicker and more powerful in its operation than the antimony. With the latter, however, a great deal of good grooming and care is necessary, or mischief may ensue from its stimulating property; as it may

indeed from the antimony, if the system be overcharged with it. When foulness of habit proceeds still further than this, and amounts to a cutaneous disease, I stop short in my practice, as mercurial or other preparations are necessary, which I am afraid to encounter. I only profess what is termed the prophylactic, or preventive, art. When disease appears I fly to the first veterinary surgeon I can meet with.

I must now return to the former part of this letter. As there can be no condition without work, the hunter, to be in good form by November, must now begin, and in the course of the months of August and September he should have some gentle sweats---at least one in each week. Having clothed him pretty heavily for this purpose, put a light boy upon him to ride him, or have him led in a soft meadow; or, if you have not that at your command, in a fallow field which has been rolled and dragged in the course of a preparation for a wheat crop. The common exertion to get over such ground, at the same time that it will benefit his general action as a hunter, will soon cause him to sweat, though he do not exceed a trot of about seven or eight miles an hour. If the weather be never so warm, take him into a well-sheltered place to scrape him, so as not to expose him to a stream of air: for this being his moulting season, his skin will be very susceptible of cold---more particularly so if he is at the same time taking the emetic tartar, or any other alterative. When nearly dry ---which, if he has been treated as I recommend in

the summer, he will soon be---put a dry hood and other dry clothes upon him: let him walk* quietly for twenty minutes, or half an hour, when he will be in good order for dressing. The currycomb, with blunt bars to it, and the hay wisp, are the only implements to be used in dressing him, as he will part with his dust sufficiently for present condition in his sweats. Let him have his water tepid, and be shut up for six hours without being disturbed.

The plan I have laid down will greatly tend to promote the condition of a horse by unloading the vessels, purifying the blood, increasing his muscle, and setting him quite free in his body---the proof of which will very shortly shew itself in the shining and healthful appearance of his skin, and the increased liveliness of his spirits. It will also secure him from the risk of inflammatory complaints, by diminishing the disposition to plethora, which must naturally arise from eating the quantity of corn (unassisted by such evacuation) which hunters should now be allowed---viz. five good feeds in the twenty-four hours. Grooms should always recollect that fever will accompany repletion: it is, indeed, against the manifest law of nature to calculate otherwise.

I must here observe that the system just laid down cannot be pursued in the month of August (if indeed in the month of September) with a

* The pace, *after* sweating a hunter at this time of the year, must be regulated by the temperature of the air. Walking will generally do, but the circulation must be kept alive till he is in his stable.

hunter which has had his summer's run at grass, but only with one which has been properly summered; and it does not require a conjurer to inform us which of the twain will be most fit to go to hounds in November!

When speaking of the coat or hair of horses, it must be remarked that the coat itself is not always an index of their general health, as there are some who, at certain periods of the year, never have a good one; but *the skin* is always a criterion to judge by. If that feels dry, with hard lumps upon it, and is of a dusty hue, with a scurf arising on the surface of it, we may depend upon it our horse is not in kind condition---even should there be no affection of his lungs, which, under such circumstances, is always to be apprehended. We may be sure his skin is preternaturally distended, and wants relaxing by such medicines as will act gently on its fibres, and also improve the general health. It is by the state of the skin that naturalists decide whether the climate is, or is not, too severe for animals which are not indigenous to it. If what is called "the yolk" rise on the surface of it, the animal will exist and do well, but not otherwise. Those inveterate disorders, grease and mange, are chiefly cutaneous.

Returning once more to the present season of the year---a season on which so much good or evil hereafter depends---I have only to urge the absolute necessity of administering alterative medicines to hunters first beginning to work; and the only precaution necessary to preserve the bloom on their coats, or to secure them from any inconvenience

from their effects, is to keep them warm, both in and out of the stable; to give them plenty of hand-rubbing to their legs, with a liberal allowance of good old corn. There are many grooms who delay giving their horses severe exercise till the month of October; but---I speak from experience ---horses so managed are not in condition on this side Christmas. That there can be no condition without long-continued work, is as true as that there would be no day if there were no night.

Mr. Professor Coleman, I understand, has given it as his opinion that horses may be gouty, and I see no reason why they should not be so. That they are bilious (though said not to possess the gall bladder), by improper secretion of the liver, there is no doubt. Whenever, therefore, I see a horse going wrong, I always inspect the inside of his eyelids, and his mouth, and if I perceive any disposition to a yellow tinge I give him a mild dose of mercurial physic, and all is well again. This complaint---by no means an uncommon one, and to which all sorts of cattle are liable---is better known by the appellation of "the yellows;" and with such as are in a state of nature the cure is by simple remedies.

As there is nothing like a little practical information, I give the following detail:—This day (August 15, 1824) I had a hunter sweated. She had on her a thick blanket-rug, under a quarter-sheet and breast-plate, with a single hood. She was once walked around a fallow-field (fresh rolled and dragged) of sixteen acres, just to enable her to throw off some of her meat. She trotted

three times around it, and cantered twice. She then walked home, about a quarter of a mile, to her stable, where (as it rained) she was scraped. I stood by with my watch in my hand, and in twelve minutes her neck was dry. At the expiration of nineteen minutes she was dry all over, having been well wisped; and, after walking out for a quarter of an hour, she was brought in and dressed. In an hour she was shut up, having had half a pail of tepid water, and her corn.

It must be observed that the mare in question is very forward in her condition, otherwise she would not have dried so soon. It was only her second sweat, but it ran off her like rain water. She was soiled, at different times, in the summer, but never lay out, and has had a course of alteratives since her physic.

LETTER XIII.

TREATMENT AFTER A HARD AND LONG RUN.—CLIPPING.

THE cock was sacred to Æsculapius, by reason of his extreme vigilance. In a former letter I have observed that one of the chief points on which a groom has to exercise his judgment is, in being apt to discover whether a horse be over-marked after a severe day's work with hounds. I have already detailed the directing symptoms of this too frequent occurrence: but although I have stated what I have found, by my own experience, to be the best way of treating him after what I have termed "a very hard day," yet I have not mentioned what I consider to be the most effectual measures to be adopted when his life appears in danger. A bad horse will seldom lose it in this honorable way; but a good one, not properly prepared, will too often go till he dies.

When a horse is very much exhausted after a long run with the hounds, a noise will sometimes be heard to proceed from his inside, which is often erroneously supposed to be the beating of his heart, whereas it proceeds from the excessive motion of the abdominal muscles. All horses, however, who die from exertions beyond the

limits of vital power die from suffocation; and on this account, as soon as we perceive a horse to be much over-marked, he should have from three to four quarts of blood drawn from his neck immediately on his getting home, to relieve the pressure on his lungs; and one ounce of carbonate of ammonia (salt of hartshorn, a powerful stimulant) should be given him every four hours during that night, and part of the next day, in a ball. Although he should be put into the coolest stable that can be found---nay, indeed, into an open shed, well littered down, if the symptoms are alarming---yet a strong determination of the blood to the surface should be kept up by friction of the legs, belly, and head, and by very warm clothing on the body. A good cordial ball, or a pint of mulled port wine well spiced, should also be given him, and his bowels should be relieved by a clyster of warm gruel. If the action of the heart and arteries do not soon abate, he should be well blistered behind his elbows, and lose some more blood; and I think I may venture to say that if this treatment does not save his life there is too much reason to fear he is beyond the reach of man.

Many persons are apt to imagine that when horses are over-marked cordials are improper, and that the reducing or repellant system is alone to be pursued. This, however, is quite a mistaken notion; for although bleeding is resorted to in order to relieve the pressure on the lungs, from the greatly increased action of the heart and arteries, yet a stimulus is afterwards wanting to assist almost expiring nature.

Permit me to lay great stress on the propriety of putting a horse, which may be thus unfortunately situated, in a place where he has free access to air, for a hot stable is destructive to him. When one of Lord Derby's huntsmen's horses came home last season in a very exhausted state, after a very tiring run with a second deer, this error was committed, he was put into his usual stall, and the usual warmth of the stable was increased by the presence of almost every servant in the house, who came from motives of humanity to inquire after the fate of a favorite old horse. Had he been well littered down under an open shed, he would have had some chance for his life; whereas, in the situation in which he was placed, he had but little, and he died the next day.

I remember witnessing a very strongly-marked instance of the dangerous effects of placing horses in warm stables before the circulation of the blood is restored to its proper standard. We had killed a fox with Lord Middleton's hounds in Warwickshire, close to the house of a gentleman who was out, and who asked several of us to take some refreshment. Cantering forward to order it, he thoughtlessly put the mare he had been riding into her stall among four other horses, and proceeded to the house. We had scarcely sat down to our luncheon, when he called me out of the room to inform me his mare was ill. On going to the stable I found her on her knees. "She is fainting," said I: "bring her into the air, and she will recover;" which she almost immediately did, and,

after walking gently about for twenty minutes, she returned to her stable comfortable and well.

Although it has been the fashion in the Old School to condemn the use of cordials, yet I have no hesitation in saying, that in the hunting stable such medicines are invaluable; and were a pint of port wine made warm with spices given to a hunter after a *very hard* day's work, I have no doubt but it would be as serviceable to him as it would be to his master. After all, what is fatigue? It is a sudden exhaustion of strength, producing languor and faintness---the consequence of too great a hurry of the animal functions! Whatever, then, speedily removes these distressing symptoms, and gives strength and cheerfulness to the body, cannot fail in being beneficial.

In all those distempers which dissipate the nervous fluid or animal spirits, I am certain cordials are good; and in all obstructions whereby the perspirable matter is thrown back on the circulation, producing a sudden diminution of strength, with increased languor and weight, they cannot fail to be of service. In the commencement of colds they are very effectual, by increasing insensible perspiration; and to horses which are what is termed "washy," and which throw off their meat, or to those which are much below their mark, they are extremely beneficial, as they not only invigorate the blood, but increase the elasticity of the muscles and strengthen the whole nervous system.

Let me not be understood to recommend the use of cordial balls on every trifling occasion, such

as a horse refusing to eat a feed of corn. In my experience with hunters I have never been much troubled with bad feeders---it being nineteen times out of twenty the fault of the system pursued with them, if a horse will not eat sufficient for the purposes he is applied to. Only let him be well cleansed with physic, and kept on good hard meat, and I will answer for his eating enough. Nothing is so prejudicial to a shy feeder as being part of the year in, and part out of, his stable. By being always kept in, and *fed regularly*, his appetite returns, as it were mechanically, at stated periods; and if kept quiet, he will eat his allowance in the twenty-four hours. Keeping horses quiet has more to do with feeding than people are aware of; and I have had a few horses in my time, which, though they would not pick up their corn quite clean in the day time, would eat half a bushel in the course of the night, if given to them.

Fretting and nervous horses are very apt to refuse their feed in strange places. A friend of mine came to see me last hunting season, and in consequence of my stables being within hearing of the cry of hounds in the kennel, one of his horses would not touch his corn for two whole days. Not having a cordial ball at hand, I gave him a tea spoonful of kyan pepper on the third day, which so stimulated his stomach that he set to and ate voraciously. This was a receipt of the late Lord Stawell's for horses that were delicate feeders.

The use of tonics is not sufficiently applied in

the progress of a hunter's condition. At certain periods, particularly in the month of October, horses are subject to considerable debility, which tonic medicines alone will remove. There are mineral tonics which are well known to every one; but for valuable horses there is nothing like the best Peruvian bark, from which I have experienced the best possible effects. Mr. Manning, Lord Jersey's head groom, recommended it to a very delicate, but a very brilliant, horse of mine some years since, and his general health was wonderfully improved by it. He had a weeping at his eyes from the lachrymal glands, a laxity of body, an indisposition to carry flesh, and general debility about him, which a steady perseverance in the bark entirely removed.

It has been a standing apophthegm with the doctors of old times that Nature never purges herself unless she wants purging. Of the human subject I do not treat; but with cattle this certainly is the case. If a cow or an ox at grass purge, or "shoot," as it is called, a dose of physic, about the same as you would give to a horse, will invariably cure it. Some horses, however, have always relaxed bowels, but still keep themselves in condition. Mr. Warde has a chesnut mare---one of the finest animals of her sort that I ever saw---who is always in that state, but nevertheless she is always equal to her work. The best treatment for such horses is constant hard food, with the occasional use of cordials and tonics.

To preserve health, a balance must be preserved between the *ingesta* and the *egesta;* consequently

another requisite in a groom is, observing a proper medium between repletion and evacuation. I have before observed that the greater part of diseases of horses arise from plethora, and plethora from high keep. Nevertheless without high keep horses cannot do their work with hounds as it ought to be done; and, generally speaking, hunters do not eat a sufficient quantity of corn, particularly if they are to carry high weights. Road coach-horses, in some stables, set us a good example for feeding; and I have no hesitation in saying, that in the hands of a good groom, or in the stable of a gentleman who knows what a hunter should be, a horse in open weather, when he can do work, should have what corn he can eat.

I have always accustomed myself to get upon my horses now and then in the progress of their condition (and I strongly recommend the practice to my brother sportsmen), just to enable me to feel them under me; and I am almost inclined to assert that I can perceive the difference of an extra feed of corn per day in the increased vigorous action of the animal. Reflection, however, must not sleep, and we must proportion work to the diet, so as to keep the circulation alive, and prevent the blood from becoming viscid; for there is a standard here to be observed which will not admit of variation: and if we overload the system with more than the efforts of nature---assisted even with such exercise as at this season of the year can be given them---can get rid of, something will soon grow wrong. Here, then, it is that those useful auxiliaries, alterative medicines, are so essential.

Horses that have been well kept in the summer will sometimes have their bodies covered with lumps, or "bumps," as they are called, having somewhat the resemblance of the effect of a sting from a wasp or a bee; but nothing alarming is to be apprehended from them. On the contrary, they indicate increasing vigour: and a mild course of diaphoretic and diuretic alteratives, assisted by not less than three or four hours' gentle exercise every day, will, in good time, remove them.

Had I been bred to the veterinary science, or had, or rather availed myself of, opportunities of witnessing scientific dissections of the horse, I should have been able to have spoken with a nicer accuracy on various points which I have now ventured to write upon. Amongst others, I should have had it in my power to enter more at large on the subject of wind, which, we all know from experience, varies so much in different horses. Doctor Paley, in his *Natural Theology*, informs us, that in the human body there is a reciprocal enlargement and contraction of the chest, to allow for the play of the lungs; and Keill (*Anat. p.* 220) observes, that in an easy respiration the breast bone is thrust out one-tenth of an inch---allowing space for forty-two cubic inches of air to enter at every such inspiration. In deeper inspirations, he adds, the capacity of the chest may be so increased as that the lungs may be distended with seventy or one hundred such inches of air. The thorax, says another celebrated anatomist, forms a kind of bellows, such as never have been, nor probably will be, made by any artificer whatever.

Now it does not appear that any motion of the thorax takes place when the lungs of horses are agitated, which the oblique position of them prevents; but their action shews itself in the flanks by the motion of the abdominal muscles. Whether then a horse be or be not clear in his wind must depend on the degree of elasticity which these parts, together with the diaphragm, possess; and as the fibres and muscles of all animals relax with rest, it is by gradual but severe exercise of them that this elasticity can be brought to the greatest perfection it is capable of. Horses with deep chests generally possess clear wind, and we must observe that such is the form of the greyhound.

How provident soever Nature may have been in the formation of the animal in question, the goodness of his wind, after going a certain distance at a rapid rate, will chiefly depend on the work he has been doing. Thus it is with a human being. The divers after pearls in the Gulf of Persia, who remain under water for such a length of time, are obliged to keep themselves in the almost constant practice of diving, or they would be unable to perform their task. There are numerous organs, appendices to the lungs, employed in the act of breathing; and all of them being either muscular or elastic, require to be kept in tone to preserve their power and elasticity. In proof of this, on the dissection of human subjects who have coughed themselves to death, the lungs have been found to be almost the only sound part of their bodies.

I have said before, that the muscles and fibres of all animals relax with rest. Wishing to avoid

asserting anything on subjects of this nature but what I have proved by the safest of all tests---experience—I must here, once more, have recourse to my own stable; and I hope the example I am about to produce will not be lost on my brother fox-hunters. Some years since I went to spend the week at that long-established and truly sporting carnival, Shrewsbury Hunt; and on the Wednesday Sir Richard Puleston's hounds met at Atcham, the seat of Lord Berwick, about four miles from the town. I had out on that day a very good mare, called Barmaid; and as I had also at that time a very good groom, Barmaid was very fit to go. I likewise had in the field a bay horse, which I had purchased a few days before from Mr. Underhill, the great Shropshire horse-dealer, and which, as might be expected, was not at all fit to go. I rode the mare myself, and my groom rode the horse, with directions to put him along as far as he could without distressing him, and then to pull him up. It so happened that we had a remarkably fine run over the severest part of Shropshire---the base of the Wrekin---when our fox, being headed, retraced his steps, and was killed in the plantation where we found him. There was a large field out, and of course a great deal of distress; but the mare carried me close to the hounds the whole way, took her fences clear to the last, and enabled me to see what I do not recollect to have ever seen since---namely, a young hound snatch at the fox as he met him in a ride in the covert, when dying before the pack; but on his shewing him his teeth, with a sort of convulsive grin peculiar to this gallant ani-

mal in the last struggle for his life, the puppy dropped his stern and suffered the fox to pass him. Now comes the sequel of the story. In consequence of this run Sir Richard purchased Barmaid to carry his huntsman, which she did in capital style for several seasons, and was killed (mind, reader!)---not by what I can exactly call a blank day, but by trotting up and down Mr. Whitmore's coverts, at Apley in the Shiffnal country, with a fox which never broke away at all! The fact was, this mare was a very hard feeder, and required a great deal of work; but a long frost having suddenly broken up, she was called upon before she was fit to go, and her vessels being overladen by rest, death, by suffocation, was the consequence.

Now then for the horse. Being by nature a game one, he went farther without shewing his distress than a bad horse would have done; and my groom---a better judge in the stable than out---not having sufficient discrimination, did not pull him up in time; and although he did not go half the distance the mare went, he was obliged to be left that night within four miles of Shrewsbury, where I saw him, on my road home, in such a state that I offered him in the evening for ten pounds to any one who would have him, though I had given nearly a hundred for him a few days before. He, however, recovered; and having made Underhill an allowance to take him again, he sold him to a gentleman in that country, who rode him a season or two, when he was also purchased by Sir Richard Puleston, to carry this same huntsman, which he did for several seasons. He was not a fast horse,

but when fit to go he would not easily tire, and he lived to be an old horse.

The above is, I think, a pretty strong proof of the absolute necessity of preparing a horse *well* before he goes to hounds, and the danger of riding him when unprepared. Numerous, however, as these instances are, they do not appear to make that impression upon sportsmen which they ought to do; and I repeat my assertion, bold as it may appear, that, taking England throughout, not one hunter in ten is fit to go to a covert's side. I will also venture to add, that provided a horse---*not* what I call "well prepared"---can go half an hour at a clipping pace with hounds, taking his fences well to the last, it is in the power of his groom to make him go for forty minutes equally well---an advantage of no small importance at the time, to say nothing of the diminution of risk from the effect of the exertion he is put to. *There is a market*, also, in which these additional ten minutes would put an additional hundred guineas, if not more, on his value.

There is another stumbling block too often in the way of my brother sportsmen in their stables; and that is, they do not sufficiently regard the constitutional peculiarities of their horses, but are too apt to prepare them all nearly alike; whereas a wide difference exists in the treatment of them. To prove this we must go to the racing stable. Lord Foley's Ospray, by Eagle out of Miss Furey (sister to Chippenham) by Trumpator, would neither take a dose of physic, nor stand training in any way; yet, when taken out of his paddock, he could beat half the horses at Newmarket for half a mile.

Lord Oxford's Victoria was obliged to be physicked after every race she ran, and in one instance (well known to all country trainers) worked it off on the road from one country race to another, but winning at both places. The dam of Sailor, as I before mentioned, was obliged to stop a day on her journey to sweat, such was her disposition to feed; whilst Mr. Mytton's Euphrates never wears a setting muzzle. When Major Pigot had York and Mantidamun, he himself told me that the one horse had three doses of physic in the same space of time that the other had seventeen!

In a correspondence I have had with Mr. Weedon, my Lord Plymouth's groom, on the subject of sweating hunters in the month of September, he very properly observes, that in such matters "no given rule can be laid down which is not liable to some exceptions;" but in general, he tells me, he sweats his horses twice a week. "This I do," said he, "in soft ground, with as little clothing as I can help, except when a horse happens to be very stout, and then I think more clothes necessary. These points," added he, "must be regulated by the groom, who ought to study the different constitutions of the animals, and give them exercise suited to their strength." These are Mr. Weedon's own words on this essential point; and the reader will find they are much in unison with what I have hitherto said on the subject, which from so good a judge I cannot but consider as a compliment.

On the *method* of sweating hunters, Mr. Weedon makes the following observation:—"As to the

method of sweating hunters, some think it immaterial; but I consider it the most safe to ride them singly. But should I have a horse, the legs of which have become stale, I clothe him well, and have him led by a lad on a hack, and sweated in that way." With valuable horses, such as Mr. Weedon had to deal with, this precaution is good.

There is one sentence in the letter which exactly accords with my doctrine in the stable. "The time," says Mr. W. "I begin to condition my hunters *(though, as I observed to you before, they are partly in condition all the year)* is about the middle of August. I trot at a moderate rate, but sufficient to warm them, and thus until the middle of September, when I begin to sweat."

There is but one point on which Mr. Weedon and myself are at issue. He tells me he gives his horses from four to five hours' *walking* exercise at this period of the year. In one of my letters on this subject I have stated my objections to long-continued walking, and those objections are founded on my own experience, and the experience and opinions of others carrying more weight than my own. The only cases of diseased hocks in horses previously sound, which have occurred in my stable, have been produced by travelling at a foot pace on the road; and I gave a very good reason why such should be the case. Bullocks walking up to London market, laden with flesh, frequently throw out spavins on the road.

In a former letter I have, I think, said nearly enough on the subject of stinting hunters with hay, but I have not been sufficiently explicit as to *water*

---in the administering which considerable judgment is necessary, in a stable of hunters of all ages, sizes, and constitutions. Every man at all acquainted with anatomy will tell us, that when the stomach and intestines are filled with water, the viscera press against the diaphragm, by which means the lungs are impeded in their functions, and temporary suffocation takes place when the animal is put to quick work. Indeed it was the old and generally well-received opinion, that, by galloping horses up hills in this state, the air vessels of their lungs were ruptured, and broken wind was the consequence.

As water is the only diluent a horse takes, a certain quantity is of course essential to his existence; but to such as are not clear in their wind---from whatever cause it may arise---no more than what is sufficient to promote digestion should be given on the day before hunting, and none after three in the afternoon. A *very small portion of hay* should also be given them, and the setting muzzle put on at night.

They who are so unfortunate as to possess finely-formed horses, with all the accomplishments of a hunter, excepting clear wind (and how often do we meet with such horses!), will find the greatest advantage in attending minutely to these particulars. Such horses should likewise be always kept internally clean by physic, as their desire for water will be thereby diminished, and they should never be more than six weeks or two months without some evacuating medicine; neither should they in the hunting season be ever five days without a

sweat. The cure here, we must remember, can never be radical, but it may be palliative; and therefore we should try all means in our power to promote it.

It is, I know, generally supposed that the horse is, by nature, a voracious animal, and will not endure long abstinence; but I think experience teaches to the contrary, and we have it on authorities not to be disputed. Travellers inform us that the inhabitants of Eastern countries ride their horses for two or three days together at a slow pace---only giving them a handful of herbage every eight hours, and they only drink once in twenty-four. We know the power of education in creating the disposition and temperament of animals, and therefore I see no reason to doubt the fact. Mr. White informs us, in his *Veterinary Dictionary*, of his having kept a horse a month without water, and that at the end of it he appeared to be cured of broken wind.

The size of a horse's stomach when compared with animals of his bulk is small; and could hunters live entirely on corn, I have no hesitation in saying they could do their work better without eating any hay; but this they cannot do. It may not be, perhaps, generally known that corn alone will sometimes get the better of the digestive powers, forming itself into a ball in the stomach, which is sometimes ruptured by it. I have, however, in more than one case, debarred a horse from eating any *long hay*---only giving him a sieve full of cut hay (saint-foin, if it could be procured) in each feed of oats, and have found the best effects

from it, when the pipes have not been so clear as I could wish.

When on the subject of hay it may not be amiss to state what I have found to be the best sort for horses that follow hounds. It should be grown on sound land, be full of flowers, of colour approaching to green; not dusty, or shewing signs of being what is called "mow-burnt," and it should feel hard in the hand. It should be fresh from the rick, or it imbibes moisture from the air; and when of this description, a little of it is sufficient, as it will supply in quality what it wants in quantity. Oats should be short and sweet, and should rattle as they are put into the bin, and if of the last year's growth but one they are to be preferred.

I have a little more to say on the subject of water. All alterations of diet affect the animal economy; but with horses in high condition nothing does it so quickly and visibly as a change of water. The number of pumps and ponds between Newmarket and Doncaster will, nineteen times out of twenty, secure the St. Leger Stakes to the north-country horses, and *vice versâ* with our great Stakes in the south. I had not been at Brighton three days last winter before I experienced the effect of the water in the altered appearance of my horses.

I do not approve of the practice of constantly giving hunters warm water in the house. It should stand in the stable for at least one night before it is used, and then it is perfectly safe, when horses have not been sweated, or been with hounds. As, however, a draught of cold water has always a slight

effect on the circulation, a hood or extra cloth should be thrown over a horse's loins after he has partaken of it.

A handful of bran stirred up in a bucket of cold water has a two-fold effect. It softens the quality of the water, and from the colour it imparts to it encourages horses to drink gruel when they come home after hunting. The danger of giving cold water after a severe run, or after profuse sweating, I need not expatiate upon. The stomach---that great centre of sympathy---partakes too much of the general exhaustion of the system not to be highly sensible to such an extreme. When its blood-vessels are distended, which no doubt they are after severe exertions, cold water will sometimes produce a total stagnation of the blood, and immediate death will ensue. A friend of mine lost a valuable gig horse in this way. He was driving him one very hot day, and by way, as he thought, of refreshing him, gave him a few swallows of water out of a deep well, and he was dead in half an hour. At all seasons of the year water that is exposed to sun and air is to be preferred, but that which runs over gravel is always cold.

Although cold water, after great exertion, is dangerous, yet it is wonderfully refreshing to horses that are exhausted. I remember once tiring a horse in the wildest part of Northamptonshire, and no village at hand. I left him in the field with my groom, scarcely able to walk; but he brought him home (sixteen miles) that night, recovering his strength and spirits, as he told me, after every sip of water he gave him on the road. The present

system of giving gruel to horses on their road home, and when they get into their stable, is a most excellent one, and greatly promotes their recovery from fatigue.

Horses that are troubled---as many a good hunter is---with chronic cough should have great attention paid to them in their water. They invariably cough after drinking it, which too plainly shews the effect it has upon them. They should be kept very short for *two days before hunting*. Their bowels should be kept free by physic, and an occasional loose cold bran mash will lessen their desire for, and obviate the necessity of, much water. Having had a horse of this description many years in my stable, I speak from good experience; and I found great benefit from the occasional use of the following medicine:---Tartar emetic, three ounces; calomel, eight drachms; purified opium, half an ounce; made into twenty-four balls, and give two per day, till effect be produced. I always have found horses which are subject to chronic cough naturally hard feeders. By no means should they be bled, as bleeding only aggravates this complaint. Frequent gentle sweats, producing a determination to the surface of the skin, and thereby relieving the lungs, should never be omitted.

What a man has always to do should be done well; therefore it may not be amiss to state what is considered by grooms to be the best method of treating a horse when in the stable. Whoever has noticed an experienced nurse handling a young infant must observe a peculiar method of touching it, which nothing but practice can give her. Thus

it is with a groom. There is a method of handling a horse peculiar to one who knows his business, which a bystander, who is a judge of such matters, cannot mistake. Even in the act of stripping him — before he puts his hand upon him to dress him—there is a method to be observed. Having secured his head and muzzled him, he first unbuckles his roller and the near side of his breast plate; when passing his left hand down the spine of the horse, he draws the clothes off, over his tail, and throws them into one side of the manger. By this method every hair in his skin will lie smoothly. When his clothes are replaced, having been well shaken, they should be put some inches forwarder than they are intended to remain; when the groom, going just behind the tail of his horse, should draw them gently down to their proper place, for the reason before mentioned. The roller and breast plate being buckled, a hood, or a linen rubber, should be thrown over the quarters. Nothing looks so awkward as to see a groom pulling a horse's clothes in an opposite direction to his coat, which must be the case if he puts them on lower down, or nearer to the tail, than he intends them to remain. In general the head and neck are dressed before the body is stripped, for which purpose the horse should be turned round in his stall; and when his legs are rubbed, first with straw and then with the hand, the toilette is completed.

When a groom who knows his business has stripped a horse, he should feel him, to judge how he is getting on in his condition, and whether he be getting his flesh on the right points. Having

satisfied himself on this head---having stripped himself (that is to say if he be a working groom) ---he sets to work to dress him---an operation in which some greatly excel others. There is, however, no harder work than dressing a horse as he should be dressed---taking into account the atmosphere in which the workman breathes.

A good dressing to a horse is, I have reason to believe, a far greater benefit than we are apt to give credit for. It produces an afflux of blood to the surface, promotes a general circulation of the system, gives elasticity to the lungs, and greatly assists wind and digestion. The brush, when vigorosly applied, has a medicinal effect on the spiracula of the skin---a great relief after sweating. It must resemble the benefit derived from the use of the flesh-brush to the human frame, so much esteemed in the warmer countries previous to the wearing of linen. The ancients had an instrument which they called a "strigil," which they employed for this purpose; and to which Persius alludes when speaking of the Roman baths---

"I puer, et strigiles Crispini ad balnea defer."

The dust in horses' skins, though it may be called an extraneous matter, secreted by the vessels of the skin, has, no doubt, its use in keeping the animal warm, and affording nourishment to the roots of the coat. Sweating, with the vigorous application of the brush, will alone remove it: and for this reason the use of the brush should be very limited during the moulting season. Among the many advantages of keeping hunters in the

house in the summer, may be reckoned that of their changing their coats sooner, and, consequently, being better prepared to meet the cold weather when it comes.

The late punishing times have enforced economy upon most people; and all good judges have given up the use of body-clothes and breast plates *in the stable*, and only use them at exercise, where they are necessary, in the winter, to prevent their clothes blowing back when meeting the wind. A sort of blanket is now used, which is manufactured in the North of England, and is very warm and comfortable, and comparatively of trifling cost. If I had all the money now before me which I have expended in body clothes, it would purchase me a good hunter---for they are soon demolished if horses sleep in them. Very few saddlers know how to make them properly---scarcely ever cutting them deep enough or long enough for full-sized horses. I am, however, a great advocate for warm clothing in the stable. It promotes the insensible perspiration that is always going on through the pores of the skin, and tends to keep horses in health.

It may be expected that I say something on the lately-adopted practice of clipping hunters. The grand object of a groom is to make his horses look as if they were well groomed, which they cannot do unless they have a fine short coat; therefore, of course, he conceives a fine short coat to be conducive to health and condition, and no doubt it is. I should certainly prefer seeing a horse of mine with a fine short coat without the aid of clipping;

but if that were not to be accomplished, I would certainly have him clipped. The advantages of a short, and the disadvantages of a long, coat, I have already treated of; but having since met with a passage in Mr. Smith's* *Treatise on the Glanders*, in which he speaks of the latter as one of the predisposing causes of that fatal complaint, I cannot perform my duty to the reader more satisfactorily than by giving his own words on this interesting subject, which equally apply to clipping:—

"A very dangerous effect of debility, or being out of condition," says Mr. Smith, p. 18, "is, that the subject has a long rough coat, which retains the perspiration excited by exercise; and even in cold weather, when the exercise is not such as to excite sweat, the insensible perspiration which is constantly issuing from the extremities of the cutaneous vessels is condensed among the hair, and appears on the surface like dew; whereby cold is produced on the surface of the body, occasioning too great a determination of blood to the lungs, or other important viscus, which is always in proportion to the diminution of the cutaneous perspiration."

As it always has been, and ever will be, with most innovations on old-established systems, objections have been made to clipping horses, and some silly reasons given for them. Among others it is asserted that it will shorten their lives, and that sooner or later they will go blind—for neither of which assertions do I see the slightest foundation. That they may be susceptible to cold, if exposed to it

* Late veterinary surgeon in the 2d regiment of Light Dragoons.

soon after the operation, is rational to conclude; but in all my inquiries from the owners of such horses I did not find this had been the case. One gentleman gave it a pretty good trial. His horse was finished clipping on the Thursday, and he swam or forded a canal three times with him on the Friday with Lord Berkeley's stag-hounds, and he was not the least the worse for it. Fat sheep, we know, are shorn in the months of February and March, and are exposed to the air with impunity, which has often excited my surprise. Some days, however, should always elapse between clipping and work.

The value of any acquisition is only to be estimated by its usefulness. Never having tried clipping, I cannot speak from my own experience; but I have been informed that horses so treated will do their work better, and come round sooner, than they did before; and I think it is easily accounted for. I was told that a master of fox-hounds had tried it in his stable with the best effect; and having had the honour of being introduced to him in the spring of 1824 at Messrs. Tattersall's, he confirmed what I had heard. It is a very nice operation, and requires much practice and no little skill to do it well; but as Nature is not easily imposed upon, it is always to be detected. Some gentlemen's grooms attempt it, but none of those whom I have seen succeeded well. There are people in London who do it at two or three guineas per horse; and, as it is the work of two days, it is worth the money to do it well.

LETTER XIV.

OBJECTIONS ANSWERED.

It is a principle in unison with all well-known facts that our will has no power over our belief; and to doubt nothing and to understand nothing are much the same. In the common walks of life the moment a man steps a little from the beaten track, that moment is he opposed in his march; and were he to yield to every obstacle he meets with, his progress would be but slow. He would resemble the man who went to a fox-chase resolving not to leap; whereas, to the fearless and experienced horseman, half the pleasure of that noble diversion consists in getting clear over, or in breaking down, the barriers which oppose him.

In the progress of my letters on the condition of hunters I have certainly gone a little out of the beaten track; or, in other words, I have travelled in a road not much frequented. In the progress of these letters, also, I have ventured to condemn a system practised by, I fear, more than two-thirds of my brother sportsmen; and I have attempted to prove that that system is wrong. Had I written these letters more than twenty years ago, when the method I have recommended was first used by myself, and but very partially adopted by others, I

should have been naturally prepared for opposition; but in these communicative times I am only surprised that the advantages of it have not circulated throughout all sporting countries---even to the county of Forfar.

My first opponent was the BIT OF A JOCKEY; but I have done with him---not conceiving that (though, perhaps, a useful writer on other matters) a person whose sporting days, by his own account, were ended before ours began, and who never saw Buckle ride*, can be authority for any practical system now adopted in the sporting world. As well might a man sit down and write a topographical description of London and Westminster, and in the concluding chapter inform us that he had never seen the horse at Charing-cross!

My next opponent was THE OLD SPORTSMAN, who talked of "mashed potatoes and Swedish turnips†" as the best food for hunters, and wished us to believe that horses and dairy maids did their work better when rough in their coats. His hounds, however, were all for the pot, and, by his own account, found more hares than foxes. The first blow is said to be half the battle; but I had the last with him, and I do not think he will resume the contest.

Next comes a correspondent under the signature of "X. B.," who commences his letter by *saying*, "Does not your valuable correspondent NIMROD think too much of his horse having five years' old oats and beans in him? If this were absolutely

* See *Sporting Magazine*, vol. xiv. *N.S. p.* 144.

† See *Sporting Magazine*, vol. xi. *N.S. p.* 268.

necessary," continues he, "what would become of our two and three-year-old horses in the race? We find they can run full as well as those at a more advanced age. In 1823 and 1824 the Craven Stakes were won by two year-olds*." My answer to this is---first, that in *my* country two year or three-year-old colts cannot have five years' hay and corn in them; secondly, *I did not say it was necessary for a hunter*. He concludes the sentence by telling us, "*I believe* the two-year-old colts are taken *from grass* in September, to run in April."

Now on all subjects but one I hate the words "I believe." One man believes one thing, and another man believes another---neither of them within two distances of the mark, nor could an argument of a thousand years bring them one whit the nearer. What would a Cambridge Professor say to a man who approached his chair and talked of *believing?* "Bring me demonstration, Sir," he would say, "and I will listen to you!" Now had X. B. taken the trouble to inform himself on this subject before he put pen to paper, he would have found that no two-year-old colt taken from grass (which in the sense he applies it, in opposition to corn, of course means grass only) in September ever did, or---we may safely add---ever will, win the Craven. He would have found that such colts have as much corn as they can eat from the time they leave the dam, and even before they are

* In 1823, by the Duke of Rutland's b. c. Scarbrough by Catton, dam by Haphazard; in 1824, by Lord Verulam's ro. c. Vargas, by Orville out of Vittoria by Sorcerer.

weaned; and that in these days a well-bred colt, with engagements over his head, may be said to be in training from *the very day he is foaled!* As to grass, there certainly may be some in the paddock he is reared in, but it forms a small portion of his food even in the course of the first year. That a two-year-old colt should win the Craven is anything but extraordinary---indeed the race is made for him. The course is but a little more than a mile*, and when the weights were fixed the chances must have been considered equal. Were the race, however, over the B. C. instead of where it is, where would be the two-year-old? His only chance then of winning it would be to put *five years' old corn* into him, and the recipe would be worth something.

The circumstance X. B. brings forward of Trajan, taken from grass, being beaten by Match'em, is rather a singular way of recommending the grazing system; and his (Trajan) having distanced two others (he does not say what) in the race, does not mend the matter at all; as, for aught we know, they may have been at grass also---may have bolted, or tumbled, or God knows what---as it is sixty-two years since (1755) the event he alludes to took place.

When X. B. speaks of four months' training being sufficient for the race-horse, he talks equally out of book; and I had nearly forgotten my good manners, and said he talked *something else*, when he told us he should be delighted to see a valuable hunter of his gallop about a hard field

* Across the Flat, one mile two furlongs twenty-four yards.

in the summer till he was hot. Were it possible that, during such frolics, a horse could be divested of his skin, and we could have a peep at the internal machinery of his frame, we should see such twists and contortions of his joints, that, if they did not make us tremble for the safety of them, would at least satisfy us that they must be a bad recipe for any injuries those joints may have received in their work in the winter. As to exercising horses in the summer, let those who think it *amuses* them practise it, on the score of humanity; but, for my own part, I never yet saw a horse out at exercise that did not wish to return to his stable.

In your last Number* a gentleman from Forfarshire (a sportsman, I am certain) comes forward, and, after enumerating "pot bellies, running thrushes, pleasant roaring," (awkward music for those who pay to hear it,) &c. &c., as the concomitants of the grazing system, energetically says, "*Now take my plan!* The hunter," says he, "must be turned out when days and nights are warm." Here, unfortunately, he is opposed by one of our first writers on the veterinary art, who says, "I have always found that when the greatest heat prevailed in the course of the day, the nights were cool, the fogs more copious and heavy, and that diseases amongst horses were then most prevalent." Nothing can be more true than this. In proportion as the action of the heart and arteries has been excited by the warmth of the day, the greater must be the effect of the damp and vapours of the night.

"The effect," says the NORTH BRITON "on the

* See *Sporting Magazine*, vol. xv. *N.S. p.* 194, &c.

sinews and joints of the hunter, by a run at grass, is past doubt in my experience." May I request him to state whether he have proved the result, by a close application of his system with the one I recommend. His recommending turning horses out to grass as a preventive of botts, cannot but create a smile, and is one of the thousand instances we meet with of a man sitting down to write on subjects *before*, instead of *after*, he has given himself time to think. If we are to believe writers on natural history, horses kept in the house *cannot have botts:* they are the larvæ of a fly that only molests him in the sunshine: but to whose existence and propagation they are as essential as the air we breathe is to our own lives. Hear what a very highly-esteemed writer* on the diseases of horses says on this subject:—"The flies from which these botts are produced inhabit the country, and do not come near houses, at least not near those of great towns: and therefore horses are never liable to have botts in their bodies if they have been kept in the house, especially in town, during the summer and autumn."

Your Northern correspondent concludes his letter by lamenting that so many promising young race-horses are nipped in the bud by early training; but as all the great stakes are for young ones, the owners of them will make their hay when the sun shines.

In the same Number X. B. again comes forward. He begins by telling us that a horse shut up in a well-littered stable in the summer *must be in a fever*, or in a state of perspiration. Away with all such trash. If this were the case, what would

* Osmer.

become of all the race-horses, post-horses, coach-horses, covering stallions, wagon-horses, saddle-horses, and all others used in the hot months? Take a horse from grass and put him into a warm stable, and no doubt he will sweat; but not so if kept on hard meat, or with occasional soiling.

X. B. talks of lessening the quantity of a hunter's food, instead of physic, to prevent plethora; and of changing the nature of it for that which is "less solid and more easy of digestion." Surely here is the OLD SPORTSMAN come again with his Swedish turnips and mashed potatoes! All this tender food may do very well for a lady's pad, or for the lady herself; but such language, when applied to the hunter, is absurd. His remarks on physic are equally unfortunate, and the "*I believe*" again stares us in the face.

I have just found out that X. B. must be an Irishman. He tells us that "when the late Colonel Mellish had a stable of hunters *all in high condition*, he could seldom have the horse he wished, as they were frequently amiss and obliged to have physic." As this gentleman paid me a handsome compliment in the concluding sentence of his letter, I ought not to be too hard upon him; but in future I shall not notice the observations of one who appears so little qualified to offer them.

I am sorry to observe that many of my brother sportsmen are convinced of the evils of turning hunters to grass, and yet subject them to them all. I lately had a remarkable instance of this. A friend of mine, riding very heavy and very hard, came to see me, and by way of punishing him for biting

one of his other horse's eyes out in the morning, he rode one of his hunters, a horse I have known for many years, and few people have a better when fit to go. On my observing that he looked like anything but what he should be, I asked him what he had been doing with him in the summer? "What I ought not to have done with him," was his reply: "I turned him out to grass. He has lost all his muscle, and he is not half the horse he was when he went out. Besides this," added he, "he has got a bad kick on his hock, and is under the hands of the veterinary surgeon at ——, who *thinks* the enlargement will be reduced by continued fomentations."

The next morning my friend and myself rode out together. His horse was wet with sweat, whilst the one I rode (summered in his stall, with only ten days' soiling) was as dry on every part of his body as when he came out of the stable.

Your sceptical readers shall have a little more demonstration. A mare which I rode last winter (1823-4) met with an accident; and being got by Walton out of Highland Lass, I thought she might breed me a racer, so I put her to the horse, and turned her out. She soon got very fat and sound; but, not proving with foal, I took her up after being out nearly three months, and she has had every justice done by her since she has been in the stable. She stands in a stall between two that have been summered in the house, and chalk is not more unlike cheese than is her condition unlike that of her neighbours. One of these is the mare that was sweated in August till "the sweat ran off

her like water," which X. B. seems to think so cruel and so weakening. Perhaps he is not aware that some of our first-rate stallions are sweated once a week during the covering season.

After what I have now said I have done with producing proofs of the good effects of summering the hunter in the house; and shall conclude the subject with mentioning an occurrence which happened---rather *à propos*---with the mare I have just been speaking of. I rode her to call on my next-door neighbour, who keeps a pack of fox-hounds; and when he saw her, he exclaimed, "Ah! you have had your mare clipped, have you?"---"No," said I, "she is not clipped, but she is *in clipping condition*," which is a much better thing. She now dries after a sweat in three minutes, which my neighbours can testify. Where is the horse which has been summered in the fields that will do this? Another circumstance took place with the Brighton harriers last winter. I was riding another mare which had three years' hard meat in her, when we were caught in a very heavy shower of rain. In about ten minutes after it was over, Mr. Carr, the gentleman who manages the Lewes harriers, rode up to me, and said, "Your mare puts me in mind of a dirty boot by the side of a clean one."---"Why so?" said I, "Because she is dry, and every other horse (seventy in number) in the field is wet," was his answer. This must denote increased vigour of body.

I seldom hunt in October, for more reasons than one. First, the flies have not done stinging the horses; secondly, the country is not fit to ride

over; and thirdly, I have always been of opinion that the month of October should be solely devoted to the master of the hounds and his servants. Mr. Chute's hounds, however, being within easy reach of me, on the 22d October 1824 I went out with them; and on the road to covert I overtook the pack. "How all the horses sweat this morning!" said the huntsman: "see how it runs off them!"--- "My horse does not sweat," said I, "I am certain." On my servant coming up with him he was as dry as when he went out of the stable. What is this a proof of? I have now, however, done with proofs.

In my twelfth letter on this subject I spoke of tonic medicines being essential to the condition of some horses at this season of the year; and have been called upon to state what I consider the best *mineral* tonic used for this purpose. The following ball, given two or three times a week till effect be produced, will be found to answer the desired end:---

Sulphate of iron, ½ ounce.
Ginger.....1 drachm.
To be made into a ball in the usual way.

LETTER XV.

ADVICE TO FARMERS—BREEDING—TREATMENT OF BROOD MARES AND COLTS—CLIPPING.

THE mind sleeps and is refreshed. It is now two months since I have put pen to paper on my favorite subject---the condition of hunters; so return to it with increased pleasure. Although I have been silent, my eyes and ears have not been shut.

In my last I observed that I had something to say on this subject to farmers. My object is to induce them to breed horses, being convinced that no other stock on their farms can pay them so well. When, however, I recommend them to breed horses, I mean that they should set about it as it ought to be done, or they had better leave it alone; for I speak without fear of contradiction when I assert, that, generally speaking, no branch of rural economy has been more abused and neglected than this. It is useless, however, to expose errors that have passed: let us endeavour to avoid them.

Under proper management a good three-parts-bred mare may be a little fortune to a farmer. I knew one in the neighbourhood of Ludlow which did not begin to breed until she had carried that

ornament to fox-hunting, the late Sir John Hill, of Hawkeston, for eleven seasons, when she produced, if I may so express myself, a thousand pounds' worth of horse-flesh in the space of seven or eight years. I myself gave two hundred and sixty guineas for two of her colts when rising four years old, and they both proved good hunters. From what other stock, may I ask, could such a return be made? I may safely assert, that the produce of this mare more than realized the fee simple of the land that reared them.

I have not time to be prolix, therefore must come to the point. When a prudent man lets loose his capital, his first consideration is whether it will return to him again? In this instance he may make sure of it if he will follow these simple directions:—Let him purchase a well-bred mare, not so much regarding her size as her points and action---particularly requiring that she have a sound constitution and good legs. Let him send her to a horse also of good form, *with freedom of action* and a sound constitution; also being particular as to the state of his legs and feet. Never let him breed from a naturally infirm horse, whose legs have shewn more than ordinary weakness*; and, above all, let him fix upon one which has what the veterinary profession call a short canon---that is, the bone extending from the knee to the fetlock, commonly called the shank bone. Let him begin to

* Though of course we should prefer legs that have never given way, yet a stallion that has raced much is not to be rejected because he has broke down at last; but we should carefully avoid those which have thrown out curbs, spavins, ring-bones, &c.

breed from his mare before she is much injured by work; as in that case, if she does not breed to please him with her first and second foal, he can dispose of her and purchase another.

A very celebrated fox-hunter has observed, that "the goodness of horses generally goes in at the mouth." Let the breeder, then, bear this in mind, and take care that the foal be dropped early, and the dam well fed for the first two months with bran mashes, carrots, &c. till the spring grass arrives. If the mare should prove a good nurse, the colt will not require corn till he is weaned, which on no account should be delayed beyond the first or second week in September. Here the grand mistake has arisen, to which we are indebted for such numbers of mis-shapen horses as this country abounds in. Farmers, in general, never think of weaning their colts till after Michaelmas, long before which period there is little or no virtue in grass, but, on the contrary, it is sour and unwholesome.

From weaning time to the following May, the colt should be well kept on a full allowance of sweet hay, with at least two good feeds of oats per day, and *he should be kept warm*. He should have a head collar on, with a small strap hanging down to his knees, which will admit of his being handled every day; and every two months his toes should be rasped, and his heels opened a little with the drawing knife. In March or April he should have two mild doses of physic, which will cause him to grow; and when the weather is warm he should be turned out into a good upland pasture for the sum-

mer, with plenty of shade and water, but taken up every month to have his legs examined and his toes rasped. The second week in September he should be housed again for the winter, when his belly should be the measure for his corn. When docked, his tail should be left eight inches in length, which will preclude the disagreeable necessity of having the operation repeated.

Early in the following spring, when turned two years old, he should be broken, but not backed; and physicked as before directed. In the first or second week in June he should be cut*; and when recovered he should be turned out for the summer. When taken up again for the winter, he should have two mild doses of physic, and be very well kept, giving him a few carrots, or a large bran mash once a week. Very early in the spring he should have a little more very mild physic; and in a fortnight afterwards he should be backed, and taught his paces by a person who understands the business. Idleness, from this time forth, will be an enemy to him; and as soon as he is perfect in his paces he should do what in the training stables is called "a little work." Exercise will strengthen his legs, enlarge his muscles, improve his form, and make him grow. From this time forth he should be treated as a horse in every respect but in his work, which should be moderate till the fifth year; but

* Though I have spoken of two years of age being the best time for cutting colts, yet this must depend on circumstances. If the owner of him has not a convenient place to keep him in, he must cut him the first year. Also, if he is likely to be too large for his legs, or what is termed "top heavy," the first year is to be preferred.

previously to that time a customer will always be ready for him, and if his owner is disposed to part with him, his average price will be from one to two hundred sovereigns.

When I say a colt should be treated as a horse after the third year, I mean, of course, that he should be treated after the system I have laid down for hunters, and not allowed his summer's run at grass. Hard meat will make him powerful and handsome: grass will render him, comparatively speaking, heavy, pot-bellied, and shapeless.

What I am now going to advance may appear like straining the point; but I am convinced of the truth of it, and therefore boldly assert it. It is my confirmed opinion, that unless a colt be what is called "deformed," it is in the power of good keep, exercise, and physic, to make him what is termed "a fine horse," and one that will sell for a large price, either for harness or the saddle. No one but those who have witnessed it are aware of the improvement in shoulders, thighs, gaskins, &c. from good old oats and beans, accompanied by regular work and proper riding. Being a great man for *proof*, I will mention one instance, which is as good as a hundred.

Five years ago, *i. e.* in 1820, I was riding to meet hounds in Oxfordshire, on a five-year-old horse, which I had just purchased, and which was much out of condition. I was joined by a brother sportsman whose experience in horses was considerable, and who was going on the same errand. "What have you got there?" said he, with some expression of surprise.---"A brute," said I, "that

I purchased the other day out of a Welch drove." ---" I thought he was not your sort," continued he. Having summered this horse after the system I adopt, I happened to come across my brother sportsman with the same pack of hounds the following season, just as I was mounting " the brute out of the Welch drove," with the intention of riding him for the day.---" *You have a very neat horse there*," said he: " where did you get him?"---" Oh," said I, " you know him."---" No," replied he, " I never saw him before."---" What!" said I, " do you not recollect the brute out of the Welch drove?"---I sold this horse the following season to Mr. Vincent Corbet for two hundred guineas---having previously refused that sum from him for another person.

When stating matters of fact on subjects so interesting to sportsmen, no one who belongs to that honorable class would object to his name being mentioned, by way of producing proof, without which argument goes for nothing. The gentleman I allude to is Mr. Martin, of Ham Court in Worcestershire, a very hard rider to hounds, and whose father succeeded to the estates of the late Major Bland, who hunted that country when I first rode over it.

As another instance of the captivating properties of condition I might mention that when at Hungerford, in January 1825, I sold one of my horses, which I considered under my weight, to Mr. Starkey, of Spy Park in Wiltshire, who told a friend of mine afterwards that he bought him more for his *condition* than anything else.

One word more to farmers. If those who follow hounds, or who breed good horses without

doing this, would pay more attention to the condition of their horses, by keeping them up in the summer, putting good instead of bad flesh upon them, they would be very well paid for their hunting, or their trouble. They may take my word for it, there never was such a demand, I might almost say outcry, for hunters as there is at the present day*. It is very well known to many of my acquaintance that I have lately had several earnest requests to purchase hunters for my friends, but I have been quite unable to comply with them. I will not say I might not have seen two or three horses that may have suited them, but I could not think of recommending them on account of their want of condition; for what is a hunter without condition?---a source of vexation, disappointment and danger.

All persons do not set the same store by condition that I do; but if they were as much alive to the advantages of it, they could not fail to do so. The following fact will best shew the price I put upon it:---A blank sheet of paper was offered to me about six weeks back, by a gentleman who keeps hounds, with a request that I would write my own cheque (*i. e.* a cheque for my own price) on his banker, and he would sign it, for a mare, which is certainly a model of the art of grooming as relates to the condition of a hunter; but which offer I refused---saying, I should not refuse such an offer

* Previous to turning out a stag one day last season before Lord Derby's hounds, I breakfasted at a gentleman's house in Surrey. Our party consisted of eight; and five of them were eagerly inquiring after hunters.

for the mare, but I could not part with her condition. Wishing to advance nothing of this sort without the accompanying corroboration, my customer was Mr. Taylor, of Holleycombe Lodge, the Member for the city of Wells.

I have now to notice two communications in your November Number on this highly interesting subject---the Condition of Hunters. The first is a very able Letter from Cheshire on the subject of clipping, to which I shall allude more fully at a future opportunity; but as the author, EQUESTRIS, asks my opinion, it is---that I would have every horse clipped that has got a long coat; and it would answer extremely well if one or two men in the neighbourhood of every Hunt would perfect themselves in the art of doing it; for they would have plenty of custom. Caution, however, should be observed. Mr. Farquharson lost one of his best horses last season in consequence of riding him too soon after the operation was performed. On the other hand, Mr. Bartlett, the dealer in Oxford-street, told me last season that his horse was clipped on the Thursday, and on the Friday he swam a canal three times with the Berkeley stag-hounds, and no ill effects were produced.

The other letter which calls for my attention is from the same part of the world, and treats of the effects of the late distemper among horses*. It concludes with the following passage :---"Though I cannot subscribe to all the doctrines advanced by your ingenious correspondent NIMROD, yet I gladly add my mite to the proof that it is a very

* See *Sporting Magazine*, vol. xv. N.S. p. 96.

mistaken notion to give hunters a summer's run, under the idea of freshening their feet and legs. I can now call to mind five hunters turned out last summer perfectly sound, and which became lame at grass." Now this I consider a main prop to my argument, as it is evident the writer knows what he is about, if he be not a professional man. If, as he asserts, the stable or loose house is the best place for the legs and feet, no doubt can remain as to its being the best for the body, where extremes of heat and cold, as well as accidents, can be avoided---setting aside the folly of putting a load of flesh on an animal, which must almost all come off again *at the expense of his legs.* When speaking of extremes of heat and cold, reader, mark this! *The thermometer stood two degrees lower on the twenty-fourth of June* 1824 *than it did on Christmas-day!* This is the old story over again, but it cannot be too deeply impressed on the observation of the reader. "*Nunquam nimis dicitur quod nunquam satis discitur.*"---"A man cannot repeat those things too often which we cannot too minutely observe," is somewhere about the English of it.

I wish I had not again to notice your correspondent X. B., as but little pleasure or amusement can arise to the reader from an argument in which I may, without presumption, assert my opponent is no match for me. "What impudence!" says one: "What assurance!" says another: and many there are, no doubt, who think that impudence and assurance are synonymous terms; whereas nothing can be more opposite to each other. The one is a mere boldness which a man assumes from a pretension to

qualities he does not possess; the other, the natural consequence of that consciousness of being right which arises in every man's breast when he knows that he is so. To the one we owe nothing; but to the other we are indebted for the greatest treasures of antiquity---for, neither Cicero nor Demosthenes, neither Ovid nor Horace, would have written as they did, had they not talked of the immortality of their works, and of the monuments that would be raised to their posterity; and I honour the judgment of a people who allowed them a reputation which it was their interest to support.

Notwithstanding what I have said, I am in perfect good fellowship with X. B., and shall be happy to hear from him on any other subject than that of the condition of hunters and race horses, on which I not only repeat my conviction that he has nothing worth communicating to the sporting world; but there are not wanting those who think that he has obtruded his opinion without any pretensions to its being heard. It is true, as he asserts, philosophers of old did believe a thing possible, and attempted to prove it afterwards; but where, may I ask, is X. B.'s proof? Surely not in the boy (what a specimen of grooming!) who had the care of the black mare just taken out of a paddock, and gave her too much corn; or in the ride to Tonbridge Wells in the month of April. "*Ne sutor ultra crepidam*," said Apelles to the cobbler.

X. B. argues strangely. When speaking of the races between Match'em and Trajan, in which Trajan was beaten twice, he says, "When I spoke of four months being sufficient, was it not to enable

Trajan to run as he did, and that the extra training he afterwards had did not mend the matter?" Certainly, I assert, it did not; because Match'em, the horse he was beaten by each time, *had his extra training also.* Had he stood still after the first race, Trajan might have won the second; but we may say of him,

> "He, like the hindmost chariot wheel, was curst,
> Still to be near, but ne'er to be the first."

X. B. accuses me of perverting the meaning of his words. If he writes in allegory, he should tell me so; but when speaking to matters of fact, I must take him literally. He could not but have seen that I was writing in irony when I spoke of putting five years' corn into a two-year-old; though it would not be the first nor the second time that an old one has started as a young one.

X. B. is rather happy in his allusion to what the hunter did when he was a foal; but perhaps it will occur to himself that he has done some things when he was a boy which it might be dangerous for him to attempt now. Let us dismiss the subject, then, with this request---that he will keep his pity for others, and not offer it to me, for there is a pitifulness in pity which I abhor. If I give it, I never wish to receive it.

I have now a word for another correspondent---a Mr. SMITH, of Woodhouses*---who has ventured to contradict my assertion, that a noise, or beating, which is often heard in the inside of a hunter after a very severe run with hounds, proceeds from the motion of the abdominal muscles,

* See *Sporting Magazine*, vol. xv. N.S. p. 125.

and not from the heart. I beg leave to inform Mr. SMITH that I have too often experienced this to believe his or any other man's assertion to the contrary; and as it happens, I have two bits of proof close at hand---for on these matters (as I say of Mr. Warde's hounds) I go not a yard without the scent. Even eloquence, without conviction, goes for nothing; and on paper it is still more essential.

About a fortnight ago we ran a fox upwards of fourteen miles, from point to point, with the Hambledon hounds; and having ridden a horse not half in condition, he was, as might be expected, somewhat distressed---never having had what could be called a check the whole way. When he got to his stable---having trotted him rather briskly to it, to enable me to send a hack to a friend---he had not recovered himself, and the motion of the abdominal vessels was as plainly to be heard as the chiming of the church clock. Having my present object in view, I sent for Mr. Ayleward, the farrier, who resides at Alresford, to witness it; and not content with this, but wishing for further corroborating testimony, I took the Rev. Mr. Norris, who resides near Havant (who had also seen the run), into my stable, and convinced him of the fact. What is singular, Mr. Norris told me, that when he saw what I had written on this subject in one of my letters on the condition of hunters, he spoke of it to a veterinary surgeon in his neighbourhood, who immediately confirmed the truth of it---adding, that the noise could not proceed from the heart, unless the heart lay where it should not lie.

A short time since, a gentleman by the name of Taylor---who resides at Beworth, and hunts regularly with Mr. Villebois', or the Hambledon hounds ---informed me that a friend of his had a horse, in the inside of which, towards the hinder part of his body, he always heard a beating noise after a run, but could not satisfy himself whence it proceeded. I then told him it was from a convulsive action of the abdominal muscles. The noise is not at all like the beating of the heart; and the ear immediately directs us to the seat of it.

Mr. SMITH also doubts the use of cordials when a horse is much exhausted after a run; but an appeal to common sense will save me the trouble of replying here. Mr. SMITH may be a veterinary surgeon, which I think he is; and he may be an excellent practitioner; but with all the respect which I have always expressed towards that highly-useful profession, there are points on which men who have much experience in riding, and the management of, hunters, can dictate a little to them. Is it to be supposed that either themselves or myself could direct Mr. Robson how to bring a race horse to the post?

I do not feel authorised in saying more on clipping the hunter at present, never having tried it; but there is sufficient proof abroad of its good effects, and particularly in the letter of your correspondent Q.*, in your October Number. He is one of the straight-forward ones, I am certain; and I can fancy myself sitting opposite to him in the twin arm-chair, talking over the sports of the day, for I

* See *Sporting Magazine*, vol. xv. N.S. p. 48.

think we are of the same kidney. Mark this expression in his letter! One of his horses was clipped last season; but "this year," adds he, "from *proper management*, he will not need the scissors." I could shew him one or two in my stable which it would puzzle any scissors to clip. A barber might shave them, and that would be all that could be done to them.

There is one part of Q.'s letter which I do not approve of, and that is his motto---"*Nugis* addere pondus." He must allow me to say---and I am sure as a sportsman he will admit the justness of my observation---that nothing which tends to fit that noble animal, the horse, for the severe, if not almost unjustifiable exertions we put him to, and thereby alleviate his sufferings, can come under the denomination of trifles. As the Poet says---

> "That heart is hard in nature, and unfit
> For human fellowship, as being void
> Of sympathy, and therefore dead alike
> To love and friendship both, that is not pleased
> *With sight of animals enjoying life;*
> *Nor feels their happiness augment his own.*"

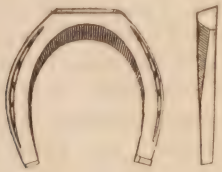
Without applying these lines to Q., whose apostrophe to his favorite old hunter rescues him from the charge, too much importance cannot be attached to this subject. For my own part, I almost adored the horse before I could ride him. How much then must my regard for him be increased in gratitude for all the pleasure he has afforded me! It grieves me to see him abused; but abused he must be when ridden after hounds, at the pace they now go, when he is not in proper

condition for the purpose---and how few do we see that are so! The horse is a generous animal, and waits not to be asked whether he can do what we require of him. *He goes till he dies.* But we should not trespass on his generosity: no; we should give him every assistance our reason, our judgment, and our experience can dictate; and I think I have said enough on this subject to make the most sceptical of your readers believe that he cannot be equal to his work till the greater part of his labours are at an end, unless he has been treated on the system I recommend. It is now becoming pretty general in some countries; I wish it may be so in all: and if what I have written may tend to make it so, not only will one object be obtained, but I shall derive an inward satisfaction of mind on which I can put no price. For this shall my sins be forgiven me; and the sun of my old age will set without a cloud.

I think Q. was imposed upon when he was told of "the cocktail that ran four miles from grass, and came in with a dry crust on her coat." I certainly have a mare (not the one I have before spoken of) whose condition is so perfect, that if hounds are running up-wind, and slacken their pace a little, she becomes dry, as several of my brother sportsmen have witnessed; and, what makes it more remarkable, she is of a hot and fractious temper.

In one of my former letters on this subject I spoke of a method of shoeing a hunter, so as effectually to prevent his cutting himself by over-reaching his legs in deep ground, or in leaping brooks. It is sometimes difficult to convey our ideas on

paper to the minds of others without the help of the pencil; and some of my brother sportsmen have told me they could not exactly comprehend what part of the shoe I recommended to be bevilled off. I called it "the inner edge of the inside of the shoe;" but the following sketch will more clearly define it.



I have never had an over-reach since I have used these shoes, but I frequently see them when the precaution is omitted. A gentleman (Major Pester) had his horse very much cut a short time since with Mr. Villebois' hounds; but on my asking him the question, I found the edge of the shoe was not bevilled off.

P. S. In proof of the profits arising from breeding half-bred colts for hunters, *when they are reared as they should be reared*, I have to mention that Mr. Martin, of whom I have already spoken, sold a four-year-old colt (quite untried), a short time since, to Mr. Langston for two hundred guineas; and Mr. Drake refused the same sum for a half-bred colt of the same age, from Sir Henry Goodricke, a few days since.

I omitted to mention one very essential part of the education of a colt designed for a hunter. His action---particularly that of his shoulders--- will be greatly benefited by riding him up and down hills, and trotting him gently in deep ground. He should also be taught to leap at three years old. If there should be the least appearance of a curb, the iron should at once be applied.

LETTER XVI.

ADVANTAGES OF CLIPPING—SALT MARSHES—HAY—GREEN MEAT.

One of our ancient historians observes, that when he tells us what he has heard, he leaves us to form our own opinions as to the truth of it; but when he describes what he has seen, he speaks to men, and expects to be believed. Theory certainly gives us an advantage; but in all matters of external nature, it is experience that proves.

I have already declared that I have long since been free'd from vulgar prejudices and bigotry to ancient customs. I will not go so far as to assert that I would do so and so, because our forefathers had not done so and so before me; yet their not having done it would by no means deter me from the attempt: for, if we may judge from modern improvements, we have too much reason to think that, with a few exceptions, they were a very dull race of men. Other circumstances also tended to rid me of those bars to improvement; and nothing more than a passage I met with some years ago in one of our Greek authors. Being now on my travels I have not the volume to refer to, but the following is the substance.

The Emperor Darius (a pretty straight-forward one, I believe), growing sick of hearing of the ancient customs of his people, and that nothing was right but what had been done by them in past ages, had recourse to the following expedient to cure them. He sent for a dozen of his subjects, and put to them the following question:---"What reward shall I give to you if you will promise to eat your fathers and your mothers when they die?" His subjects, with one voice, exclaimed, they hoped His Majesty would not repeat so unnatural a request, as nothing he could give them---not even his kingdom---would induce them to comply with it. On a signal being given, twelve Indians, brought thither for the purpose, were ushered into the Royal presence, and to whom the Emperor, through his interpreter, put the following question:---"What reward shall I give to you *not* to eat your fathers and your mothers when they die?" The savages fell upon their knees, and with yells and lamentations implored the King not to enforce such a command, as nothing should induce them to forego so signal an act of respect to their departed parents.

Having thus written it may be easily imagined that I was not to be deterred from clipping a hunter because my forefathers had never clipped one before me; but on the contrary, being eager to adopt any experiment which may tend to promote my favorite object---the condition of the hunter---I availed myself of the first *favorable* opportunity of trying it; and I now give the result.

In November 1824 I purchased a horse of fair character, formerly the property of Mr. George Delmè. He had been turned out to grass in the summer; had had his three doses of physic; had been hunted; and was what is called "in condition." When, however, I came to ride him, I found him quite below the mark, and not so good by a stone as from his form and action he ought to have been. He had a long thick coat upon him, and was what grooms call "very bad to dry"—always breaking out three or four times in the course of the evening of the day on which he hunted, and his ears were generally cold and wet. In addition to these signs of debility, he always had a damp feel to the hand, down his quarters, in the stable, after only common exercise, and he sweated with very little exertion. I gave him some tonic medicines (bark and gentian root), during the operation of which the dampness on his quarters ceased, and he appeared more healthy and vigorous; but on leaving off the medicine the symptoms returned. I then had him clipped; and in the course of a fortnight the good effects were visible. His flesh increased; his muscles grew larger; he did not sweat so soon; he dried sooner; and the dew on his quarters, when in the stable, was very seldom to be perceived. He broke out, however, as it is termed, after every day's hunting as before, and continued to do so till the end of the season; neither will anything obviate that, or put him into condition, but being summered upon hard meat.

It has never yet happened to me not to be able to get a short coat upon a hunter, or to make him

dry soon, and not break out again after a run, when summered in the house, and subjected to a proper course of alterative medicines when in his work; but should I ever be in possession of a horse whose state of body renders him liable to such inconveniences, I would instantly have him clipped. With common precautions---an extra rug and a hood at exercise for two or three days after the operation---no danger* need be apprehended; and I will take upon myself to say that a clipped horse will come out once, if not twice more in a month, and at the same time keep up his flesh better, than one with a long thick coat. Notwithstanding this, the natural short coat is to be preferred, and is, ninety-nine times in a hundred, to be obtained by proper stable management.

In the second part of Mr. William Percivall's *Elementary Lectures on the Veterinary Art* (with the perusal of which, as far as I have yet gone, I am extremely well pleased) are some interesting remarks which apply indirectly to clipping. "The coat of the horse," says he, "is shed twice during the year---a phenomenon exhibited with great regularity so long as the animal remains wild; but as soon as he is domesticated, this process is influenced by many circumstances connected with the stable management; though by none, perhaps, more than the temperature of the stable. Heat," adds he, "is absolutely and indispensably necessary to the production of a fine coat: cleanliness, friction, and attention to the general health---all comprised in good grooming---contribute to this

* Lord Jersey gave four hundred guineas for a hunter in 1824, and clipped him the next day.

condition of the hair; but the principal, the essential agent is *heat*, either generated by warm clothing or conveyed by natural or artificial temperature. To explain the operation of heat upon the skin and coat---it must, in the first instance, determine an unusual flow of blood to it, and probably *increases* the circulation of the cutaneous system; the natural consequences of which are an augmentation of its secretions among others of the perspirable fluid, and of the unctuous or oleaginous matter that pervades the hair: this gives a renewed suppleness to the skin, and a kindly feel and gloss to the coat. Without the agency of heat, then, it is absolute nonsense to talk of making horses look well in their coats. A strong sympathy," however, adds Mr. Percivall, "exists between the skin and the alimentary canal; and we might *ad infinitum* bestow our labour on the former without effect, unless we were at the same time to direct our attention to the latter."

Now, although Mr. Percivall afterwards insists on the necessity of well-ventilated stables, he completely bears me out in my assertion at the commencement of my labours on this interesting subject---"that no horse can look well in a cold stable; neither can any hunter be in blooming condition without the use of alterative medicines; and that, by some means or other, to be in health, he must have a short coat, which will enable the perspired matter to escape."

With reference to clipping, or to short natural coats, it may not be amiss to observe that Mr. Percivall speaks of horses in certain climates that

are hairless; and it appears that Mr. Sewell, in the course of his visit to the Continental veterinary schools, met with, at Berlin, "a preparation of the skin of an African horse, which had not the slightest appearance of a single hair upon it."

I now beg leave to offer my sentiments on the operation of clipping the hunter in a few words. I would recommend every horse to be clipped if turned out to grass in the summer, as affording the only possible chance of getting him into condition for hunting, till hunting is almost over; and I would clip every horse on which I could not get a good coat by any other means; but I should much prefer a natural short coat, close in its texture, glossy to the eye, a little unctuous or oily to the touch, and quite free from curl or scurf. I should then, *and only then*, be sure that my horse was well.

I should enter more upon the benefits resulting from this practice had they not been so clearly defined by a master-hand under the signature of EQUESTRIS:—This writer says, "I must own myself a very decided advocate for the clipping of hunters, having observed such horses to have had a most decided advantage, during the last season, with the Cheshire, Sir Richard Puleston's, and Sir Thomas Stanley's fox-hounds, as well as with the Chester harriers, now under the very superior management of Captain Puleston. Experience and observation are, in this matter, worth a bushel of *à priori* reasoning; but scientific argument and rational explanation are not wanting to aid and enforce the practice of *clipping*. In the first place

and to begin with the most trifling reason---the horse is a pound lighter; and the coat affording little resistance to the brush, your groom is not half so soon fatigued in dressing, and lays double strength upon the surface. This causes a greater determination to the extreme vessels, and the insensible perspiration is proportionably increased. We invariably find a connexion between the action of the skin and that of the intestines; and this is sufficiently evident in a well groomed horse; the lacteals of the bowels seem to have a corresponding action communicated to them---they absorb and select the pabulum of the blood with increased vigour---the secreting vessels of the stomach furnish the gastric solvent more abundantly---the liver more readily acts, and separates those vitiated parts which have fulfilled their duties in the circulation, and require to be thrown out of the system, but in their transit, in the form of bile, perform other important uses, in stimulating the intestines to that regular peristaltic motion which secures a change of particles to the vessels which absorb the nourishment for the blood. But the abdominal viscera do not alone benefit by the more intimate friction which is admitted to the skin of a *clipped* horse. The lungs are wonderfully assisted the more the insensible prespiration is increased: the less work for them to accomplish, the less will be the determination to the internal vessels; and consequently the less risk of congestion in the minute bronchial ramifications of the lungs. Every man of information knows that most important changes are effected on the blood in passing through

the lungs: the blood is carried to them in a black state, or venous blood: it is returned of bright red colour, or what is called arterial blood. Now this, we know, is effected by the atmospheric air being freely admitted to the air cells of the lungs. In respiration, the air is vitiated, as well as diminished in bulk. This is readily shewn by breathing, through a bent tube, the air of a glass jar inverted over water: after a few inspirations, it will be found so far spoiled that it will not support combustion, and, being *poured* upon a lighted candle, will instantly extinguish it. Thus, if the vessels of the lungs are in an overloaded state, the atmospheric air cannot get free admission; the proper changes cannot be effected in the blood; a quickened respiration takes place; and, in order to supply the want of capacity, the horse heaves in his flanks, and becomes thick-winded, and by no means fit for quick work.

"Further, I think the practice of clipping is eminently useful, as it affects the habits and reasoning of grooms, whose ignorance of all true anatomical and physiological information is scarcely to be wondered at, considering the erroneous doctrines of their masters. The groom is universally anxious that his horse should carry a fine coat; and, to effect this, the heat of the stable is to be raised by every means in his power; and, in consequence, the formation of ammoniacal gas takes place, and is diffused through the building, which, owing to the want of proper ventilation, cannot escape: therefore those highly delicate and sensitive organs, the eye and the lungs, are exposed to all the

destructive effects, not of the heat merely, but of the pestilential effluvium raised and held in atmospheric solution by this heat. When the horse is well clipped the coat is fine, and lies well without any trouble; therefore the groom does not find it necessary to raise the heat of his stable beyond a proper point, to affect that which he fancies, but I do not, to be a *sine qua non* of good condition—namely, a fine coat. Never let us forget that *condition* is that state of the body in which the various powers of the horse are fitted for the most active and useful exertion; and this must mainly depend upon the lungs: therefore, if the atmosphere contain effluvia not useful in purifying the blood as it passes through the lungs; but, on the contrary, positively pernicious, the volume of pure air respired must be less fit for the use of the lungs in an inverse ratio to the heat of the stable. I hope to see the day when this will be acknowledged by racing grooms, when I anticipate, that, instead of the constitution of that beautiful animal, the race horse, being ruined generally, and unfit for the turf at eight years old, he will be in reality, what nature designed, only just come to his prime. As a general rule, I wish to persuade all grooms to think, whenever a stable is so warm or so close as to give the slightest irritation to the eyes of the person coming out of the open air, it is then not in a fit state for any horse to breathe, and he *cannot* breathe it without detriment to his condition, although I allow it may contribute to the smoothness of his coat, which is, in my opinion a totally different thing.

"A sporting friend of mine, who is always to be found in the front ranks in the Nottinghamshire Hunts, heats his stable by hot air, insisting "that the horse is an animal which delights in heat; and being found in the highest perfection in warm climates, a warm atmosphere must be natural to him, and therefore most proper:" but I contend, that a horse, like the Arabian or Persian, always breathing pure uncontaminated warm air, with its full proportion of oxygen, picketed perhaps without any covering, or at most sheltered from the rain only by a tent, and, whenever exercised abroad, still surrounded by the same *pure* and warm atmosphere, cannot fairly be drawn in comparison with the English horse, which, to be useful, must be exposed to every variation of our variable climate.

"We are keeping our pampered field and turf horses in a temperature in which we, with the heat of our bodies only at 98, could not long exist without inducing disease, either in the active form of fever and inflammation, or in the more imperceptible, though equally destructive forms of scrofula, hepatitis, and a long *et cetera* of chronic diseases. How then can we expect that the horse, with the animal heat at 104, and therefore more fitted to withstand cold than ourselves, should retain his health for many years when subjected to such murderous discipline? Surely the sensations of the animal itself must be the best criterion of what nature requires; and I will venture to say that nine horses out of ten will, if the stable door be open, instantly walk out into the fresh air, instead of remaining in the close contaminated

atmosphere which our wise grooms and their equally wise masters insist upon being best fitted to bring the muscular power of the horse to the greatest perfection.

"I hail with delight any plan, any idea, which, however remotely, saves my favorite horse from the horrible discipline of living in an atmosphere where the proper changes and purifications cannot take place in the lungs, and from the egregious folly of pampering an animal in a heat of seventy degrees, when his utility depends upon his being able to perform his work with comfort and ease in an atmosphere of forty."

"Great benefit has to my knowledge," observes another correspondent (SNAFFLE), "frequently arisen from a summer run in a salt marsh, where a part was daily flooded at high water, and where the pasture was not too luxuriant, and the necessary shelter afforded. It has, I am aware," he continues, "its disadvantages; among which may be numbered the dangers likely to arise from huddling so many horses together as are generally found in a marsh, and that it does not suit all constitutions, or, generally speaking, young horses."

As SNAFFLE asks my opinion on this plan I readily give it, acknowledging at the same time that I never tried it, nor would I recommend any one to do so. About two months ago I spent a week with a friend of mine in Warwickshire, who, amongst all the agreeable things this world can afford, has three good hunters in his stable. "Now," said he to me, "I have

found out how to get hunters into condition! Don't preach to me about hard meat and alteratives; but give me a good salt marsh." Going the next day into the stable, I saw his favorite horse with a very enlarged hock. "What's this, Will?" said I to his groom. "He was kicked in the salt marsh, Sir," replied Will.---"This is a clever grey horse," resumed I to his groom; "what makes him so thin?"---"He has been in a salt marsh."---"What is the matter with his hock, that it appears twice as big as the other?"---"He was kicked in the salt marsh, Sir."---"Are you certain," continued I, "that neither of them has caught the glanders?" On his assuring me that neither of them had, I told him his master was always a lucky man, or he would not have come off so cheap. So much, then, reader, for the benefit of a salt marsh. But "what is salt without its saltness?" is a question which has been asked before.

As I find I have still some opponents to my plan of summering the hunter in the house, and though some of them are so feeble that they are scarcely worth a remark; yet, upon the principle that "*Nihil tam firmum est cui periculum non sit etiam ab invalido;*" or, in humble English, that "the strongest things are in danger from the weakest;" I shall bring forward a little more testimony to my aid, as I have it so close at hand.

In the first place, I rode the horse of which I have just been speaking one very wet day this last season with Mr. Warde's hounds. I had another horse out which had been summered in the stable, and which returned home at the same time with

the other---each drenched with rain. The horse summered in the stable was dry and had his clothes on in little more than half an hour; whilst the one summered in the fields was not dry after three hours' hard labour being bestowed upon him by two stout men. This was the first week in December.

The following is a still stronger case. In the month of January 1825, I spent a week with Mr. Smith, who has the management of the Hambledon hounds; and as there were no convenient public stables at hand, he was kind enough to give me two stalls among his own stud. It so happened that we returned together one day after hunting; and whilst lounging about the kennel, about half an hour elapsed previous to our going into the house. In this short period the horse I had been riding was dry, and had his clothes on; whilst the heads and fore-quarters of those Mr. Smith and his men had been riding were not finished dressing, neither were their saddles taken off. I had the clothes taken off my horse to convince Mr. Smith that he was perfectly dry; and I need not add that he expressed his opinion satisfactorily as to which was the better plan---summering the hunter in the house, or summering him, as his had been, in the fields.

On talking over this matter with Sir Bellingham Graham---than whom no man of his years has had more experience in good horse flesh---he told me that in the summer of 1824 he unfortunately turned out an old favorite of his, which had been ten years in the stable, and he went broken-winded in six weeks! "Though getting an old horse,"

said Sir Bellingham, "I would willingly give one hundred guineas to have him as good now as he was the day he was turned out."

I could bring forward innumerable instances similar to the above, but my greatest triumph is now at hand:---Mr. Harvey Combe, with whom I had passed a few days whilst hunting with the Old Berkeley hounds, and who, I had previously heard, and was soon convinced, was a strenuous opposer of the system of summering hunters in the house, and no argument of mine appeared to make the least impression upon him. On the last evening of our meeting, however, he addressed me thus: "I certainly have opposed your plan, but I never shut my eyes to conviction; and, from what I have seen of your horses, and the manner in which they have carried you, I shall not turn my horses to grass again in the summer."

Meeting with Henry Oldaker the next morning, on my road to Sir Thomas Mostyn's hounds, I addressed him thus: "Oldaker, I congratulate you."---"On what, Sir?" said he. "Why," replied I, "next season you will ride across the country like a gentleman; your horses will be kept in condition in the summer."---"Mr. Combe told me so yesterday," continued Oldaker.

Now, reader, one hundred sovereigns is a very pretty "find" in any man's pocket, and particularly so in one which is sometimes drawn a blank; but, as I hope for salvation, I would not take that sum for this admission of Mr. Combe's. It had no little additional weight with me, as coming from a man, not only a good judge of most things, but

a man remarkable for a natural independence of mind and manner, which is observable at first sight.

During the months of March and April almost all horses look well; but I should be unjust to myself and to the system I am advocating, were I not to state that all through the *early* part of the season the condition of my horses was admitted, by all who saw them with the different packs of hounds with which I hunted, to be very superior. I should also be unjust towards my brother sportsmen were I not to inform them of every circumstance that might contribute to this superiority; and one is, *the strict attention I pay to the quality of the hay my horses eat when getting into condition.* As there is nothing like chapter and verse upon these matters, I now state, that with fifty tons of hay in my own rick-yard, I sent five miles for that which I considered much superior, and for which I gave five guineas per ton.

During the early part of the season there was one property attending the condition of my horses which I must be allowed to mention, and which particularly attracted the notice of my brother sportsmen; and that is---*the clean appearance of their skins after sweating.* When we see a thick scum, having a resemblance to paste, hanging upon a horse after profuse sweating, we may be assured his blood is not in a proper state; and this is almost invariably the case up to the end of February with horses which have been summered in the fields, and whose blood has not been well cleansed by alteratives or sweating, of which, under those circumstances, time

will not sufficiently admit. Some people will tell us they do not regard seeing their hunters lather when they sweat: I never suffer mine to do so in the field in the hunting months.

I was much pleased with an observation made to me a short time ago by Mr. Wilde, veterinary surgeon, of Oxford, when shewing me his conveniences for summering his hunters, of which he has a considerable number, for the use, not of the reading, but of the sporting part of the University. "That quantity of grass," said he, "(from 100lbs. to 150lbs. in weight,) which a horse eats per day, when left to his own discretion, distends his bowels, and consequently weakens the powers of his digestion to such a degree, that, when he comes all at once to live on hard food, danger from inflammatory complaints must always attend him. As to the evils from grazing to hunters' legs and feet, those," continued he, "are innumerable. *Rest*, and not galloping about, kicking and stamping, is what hunters' legs require."

Although summering hunters in the stable is, as I have before observed, becoming pretty general in some counties, yet I have reason to believe that I go one step farther than most others do, in giving them but a small quantity of green meat. The advantage, however, of stinting them in this article of food in the summer is very evident in the winter; and I lately proved it in one instance, by a comparison with a horse out of a stable long celebrated for condition---namely, that of Sir Henry Peyton. We had run a fox very sharply with Sir Thomas Mostyn's hounds for twenty-five minutes, and came

to an awkward check owing to a change of scent. Observing Sir Henry's horse smoking very much, and the one I was riding not smoking at all, but getting dry about the neck and shoulders, I rode up to her Sir Henry and pointed out the relative state of our steeds---at the same time remarking to him, that hunters should eat but a small quantity of green food in the summer, and that only at intervals. Sir Henry's horses have for many years been summered in the house, eating plenty of corn, but I have reason to believe more grass than is good for them.

I have often been asked what quantity of green meat I would give a hunter in the summer. My answer is---as much (repeated at intervals during the months of May and June) as will relax his bowels for three or four days together, and then put him back on his hay. It is a very good plan to mix hay and grass together; and in my opinion, vetches (if given at all) should never be given for any length of time alone. Soiling animals in the stable is a practice of very old date, having formed part of the Virgilian system.

I have also been more than once asked whether I do not make rather a free use of antimonial alteratives. My answer has been, that I do so---being convinced that hunters, which must not be sweated like race horses, but which ought to have as much good keep in them as they have, cannot be got clean in their habit, and put into proper condition without them. Of their efficacy I was by accident convinced very early in life, by a circumstance which occurred in my own family. My father was a

better judge of books than of horses, but, as a matter of course, had always a certain number of the latter in his stables, though condition was a stranger there. One year, however, by the help of a Welch pony, the riff, or mange, was introduced amongst them, and they were all regularly dressed over before the saddle-room fire with sulphurous and mercurial preparations; and regular courses of mercurial and antimonial alteratives were administered to them. The effect of all this was so great that the old gentleman used ever afterwards to declare that he never had his horses in condition *but once, and that was owing to their having the mange.* The effect, however, was visible for twelve months afterwards.

I have given the following alterative with the greatest success; and to horses gross in their habit one ball every week may be taken. It also acts as a febrifuge after a severe day's work—

Cinnabar of antimony.. .....3 ounces.
Balsam of sulphur .....2 ditto.
Camphor ....1 ditto.
Nitre .....4 ditto.

To be made into ten balls.

It happened to myself some years since to have a brilliant hunter in my stable; but of so vicious a disposition that all attempts to clean, with wisp or brush, certain parts of his body were attended with great personal danger. Wishing to avoid accidents, I always had him washed with warm water and soap, to which he quietly submitted, and we dried him as well as his temper would allow us. It then occurred to me that washing hunters which

had very fine coats might be beneficial, inasmuch as it would be the means of their being cleaned quickly, and the effect of the warm water and the friction would be beneficial to them after their fatigue. I lately found out, during my visit to Melton, that Sir Henry Goodricke had done it for some time past in his stables in Leicestershire, and had experienced from it the very best results.

All the world knows that Sir Henry is one of the very hardest riders of the day, and, as such, quite awake to the necessity of having his horses in condition. Here, however, he goes one step beyond me; for he not only gives his hunters the best hay and oats with their green meat in the summer (with exercise also), but he adds beans to their food. In the treatment of horses' legs also Sir Henry knows what he is about, and I have taken a leaf out of his book.

It is extremely gratifying to me to learn that the system recommended will not only be very generally adopted, but that the subject itself is becoming one of interest and consideration among gentlemen who hunt, and not left, as before, to the sole discrimination of their grooms. When once it is considered, its importance is self-evident; and the direction of it ought to proceed from those who are best able to appreciate its value. Heretofore hunters, with some exceptions, have not had fair play.

LETTER XVII.

DISADVANTAGES OF CLIPPING—TREATMENT—COMPARATIVE EXPENSE OF SUMMERING IN THE HOUSE AND AT GRASS —FIRING.

"REWARD sweetens labour." This is a proverb almost as old as Time, and it speaks the language of Truth. I have received so many flattering testimonies to the benefits derived from my system of summering the hunter, that I sit down again to the task with renewed vigour. One individual, however (perhaps of the description of persons who would not believe though one rose from the dead), says he cannot *afford* to summer his hunters in the house. I flattered myself I had succeeded in making it appear, that, in the end, it were by far the cheaper way of keeping them; for, independently of the fact, that four horses so summered will do the work of five summered in the fields, should it be a man's object (as the term is) *to keep his money together in his stable*, the fascinating power of high and blooming condition, with firm flesh and prominent muscle, will alone effect it---for that will always command customers. For my own part, I can safely assert, that almost all the good luck I have had with my horses has been the result of a perseverance in keeping them upon hard meat, and secure from the mischievous

effects of the unrestrained use of their legs, and the sudden, and consequently dangerous, changes of this variable climate---setting accidents quite out of the question.

I have hitherto carefully avoided asserting anything on my present subject but what has been the result of experience in my own, or in some other man's, stables; and it is my intention strictly to adhere to this prudent plan. I shall therefore (having tried it) proceed to give my opinion of clipping the hunter, which will only occupy a few lines.

Were I to give a good price for a promising young horse for the purpose of making him a hunter, and keeping him for my own use, and a man were to come into my stable and tell me he would give me one-third of his value if I would have him clipped, I would refuse his offer. I look upon clipping as nothing but a bad substitute for good grooming, and an operation attended with several disadvantages. In the first place, when once performed it must always be repeated; and in the second, it is a constant eye-sore to a person who is fond of seeing his horses looking well, as it effectually destroys that bloom on the skin which is not only so beautiful, but also so confirmatory of the sound health of the animal; and lastly, by depriving him of the protection which a short thick coat, lying close to the body, affords him against the scratching of thorns and briars, it very frequently causes a horse to refuse rough places in a fence which he would not have refused before. It is a remedy to be sure, or at least a palliative; but I had rather a

horse of mine should endure the disease it is intended to relieve, until I could bring a better medicine to his aid; and were I to become possessed of a hunter which required clipping, I would put up with his long coat and evening sweats, until, by strengthening his general system, I got rid of the latter, to which the former is by no means a certain contributor. It is quite possible---and I have an instance at this moment in my own stable ---for a horse to have a long coat* (and some horses at certain periods will not wear a short coat), but still to look very blooming to the eye, *and dry immediately after a sweat*, as is the case with the horse I speak of. I am not weak enough to suppose that clipping will not continue to be practised because one individual disapproves of it; but I may be allowed to say I will never after this year practise it again. The horse I had clipped last winter must now, I fear, be clipped again, for I abhor the sight of him in his present state---his coat somewhat resembling a poodle dog; but his evening sweats are got rid of by the method I pursued with him in the summer, which I shall presently detail. Clipping may be all very well for those who cannot, or will not, get their horses into condition by other means; and to such only do I recommend it.

It may not, perhaps, be uninteresting to detail

* Two or three of my brother sportsmen have told me tha keeping their horses up in the summer has not shortened their coats so much as they expected; but they all said they dried immediately after coming into their stables, and were not subject to evening sweats after hunting—a most material point gained. I am happy to say I have not met with one man who has had reason to repent having followed my advice.

the way in which I treated my hunters during the summer of 1825, taken from minutes made in each succeeding week. They were six in number, and their treatment is severally described.

From the regular course of alterative medicine which my horses go through in the course of the hunting season, it often happens that at the conclusion of it there is no immediate call for physic, and such was the case with them last spring. They ceased from their labours on the 20th of April, and (with the exception of one that was fired) continued their usual food, with very gentle exercise, till the seventh of May, when they had their shoes taken off and some grass given them in the day time, but racked up at night with hay; and so treated till the nineteenth of the same month, when they were put entirely upon hay again. On the eleventh of June they were soiled again in the day time, till the twentieth of that month, when they were prepared for physic, which they had on the twenty-second. From that time four of them never tasted grass again; but the other two had a few vetches (say about an arm-full) mixed with their hay every other day till the sixth of July, when they were all shod, and began gentle exercise. From the seventh of May to the sixth of July---a period of eight weeks and four days---these horses were without shoes, their feet having been closely pared down; and they were thus treated. Nos. 1 and 2 were in a building sixteen yards long by six wide, well littered down, and with an outlet into a small green-yard, in which there was a running stream. No. 3 was in a covered building, twelve yards long by six wide, one half littered down, and the other

half a well-paved brick floor, but no other outlet. No. 4 was in a box, eighteen feet by eighteen, kept quite dark to keep out the flies, which terrified him to an uncommon degree. This horse was turned out into a small paddock forty yards square, about six times in the course of the summer, after the sun was set, but no fence we could make would confine him there. No. 5 was fired, and stood in a stall all day, but put into the paddock in the cool of the evening and very early in the morning. No. 6 was kept in an airy box, but, being vicious, was not out in the paddock so often as I wished her to be. Each horse had three quarterns of oats per day, and three of them had a single handful of beans in each feed. Each horse also stood two hours every day in a clay-box. The clay-box is a covered building, sixteen feet by twelve, on the floor of which a wagon load of clay was spread, and about every third morning two or three buckets of water were thrown over it. I consider this a most essential benefit to horses' feet, increased, no doubt, by their walking a certain distance every day barefoot, with their soles thinly pared and their frogs well let down on the ground. On the eighteenth of July they each had one other mild dose of physic; and in the month of August each horse ate half a pound of antimony---an ounce a day for eight successive days*. This is all the physic my horses have had

* A very sporting character in the North of England wrote to me last year to ask me whether I did not think the quantity of antimony here used excessive? I answered his letter by assuring him that I had always found the best effects from it. It corrects the acrimony of the blood, promotes the secretion, and I might almost say ensures future condition. As a proof of this, it is in some shape or other the

since the last hunting season, nor do I expect they will require any more till after Christmas; but they have partaken freely of alterative medicine, some of them, whose nature is gross, having had one alterative ball every week*.

Now then let us make a little calculation as to the expense of summering these horses in the way I have been describing, and compare it with what they would have cost at grass. We will call the period nine weeks, for the sake of avoiding fractions. When in work, six horses in my stable ate exactly three hundred weight of hay per week; but in these large loose places, allowing for waste and better appetites, we will give them nearly double the quantity, and say, six horses shall eat five hundred weight per week.

Two tons five cwt. of hay, at 4l. per ton	£	9	0
Seventy-one bushels of oats, at 4s. per bushel		14	4
Beans		1	10
		24	14
Six horses at grass nine weeks, at 4s. per week		10	16
Difference	£	13	18

leading article in all alterative medicines for man or horse. A clergyman in Devonshire wrote to me some time since, referring me to an article in the *Encyclopædia Britannica*, containing a curious account of a highly-beneficial experiment on feeding pigs by the help of this drug.

* Alterative medicines are necessary in the summer months with horses that eat corn. They keep off inflammatory attacks and improve their general health. A neighbour of mine lately lost a valuable horse which he was making up for sale. He lived on green meat and corn; but was seized with inflammation of the lungs, and died. On my asking him whether he had any alterative medicine given him in the course of the summer, he replied he had not. I had seen this horse run in the spring, looking very lusty in his work, and just the sort of horse to be affected by the treatment he received. Had he lived on hay and corn, instead of green meat and corn, it is my opinion he might not have been attacked as he was.

Thus it appears that the difference in the expense of six horses summered in the house, and six horses summered in the fields, only amounts, after all, to 13*l.* 18*s.*; three pounds of which would at least be repaid in manure made in the time. As to the sum of 13*l.* 18*s.*, at least twice that amount would be realised in the value *of any one of the horses* if he were exposed to sale at the commencement of the following hunting season.

"You are a great man for proof," said a friend to me a short time since; "why do you not offer the following bet to the sporting world, and I will go your halves?---Let two hunters be tried to within half a pound of each other, on the twentieth of April, when hunting generally is at an end---and let one be turned out to grass on the first of May, and taken up on the first of August; and let the other be summered on your plan in the house. Give the horse summered in the fields a stone; and run him two miles for two hundred guineas on the first of November." My answer to this was, that, in the first place, the sum proposed was unnecessarily large for the object of deciding the question; and, in the next place, 14lb. was great weight to give; but as far as one hundred guineas for the match, and 10lbs. as the weight given, I was open to any man who would accept the challenge; and think it but fair to say I have no doubt of the result.

I perfectly agree with my friend in thinking that on matters of this nature proof is everything; and by way of proving *the value* of condition, I am willing to expose the history of my own stable,

which will shew that the value of the animal does not consist in the prime cost, but in the effect produced by condition. I have five horses now in my stable, which cost *only one hundred and ninety-four guineas, and one which cost seventy*. For the last-mentioned horse I have been twice offered 200gs. and once offered 150gs. For two of the others I was last season offered my own price. One of the five I purchased for fifteen pounds. She was twice sent to Tattersall's, and was also at half the Commission Stables in London, but, although got by Walton out of Highland Lass by Highland Fling, a son of Spadille, no one would offer five pounds for her, and no wonder. She was a weakly-looking animal, with a hollow back, a dejected countenance, and a pot-belly, and said to be half blind. She has now been nearly three years in my stable; and I will shew her (I hate boasting) for symmetry, power, and action, against anything of her size; and I have no hesitation in saying *she is equal to as much weight again as she was when I purchased her.*

When discussing the subject of summering hunters lately with a friend, who is an advocate for the grazing system, he made use of the following expression:—"I dare say it may be all very well to keep them in the house in the summer, but then they have not the benefit of *the rest* which they get when at grass." I could not help smiling at this strange perversion of facts; and ventured to ask him whether, if he were to be examined in Natural Philosophy, and asked, *what is rest*—he would answer, *motion?* and that would not be a whit less

absurd. If rest be desirable for a hunter's legs after the labours of a winter, surely he must obtain it more effectually in a small confined place than when suffered to run over a large track of land, stamping the ground with his feet for sixteen of twenty-four hours of the day and night. I also put the following question to him:—"Suppose I were to say to you, I am going to send one of my hunters as far as York, will you let my servant lead yours in his hand—would you not think I were mad?" He answered in the affirmative; and I believe he thought I really was so, when I told him I had rather a hunter of mine were led to Edinburgh and back, than that he should be turned out to grass (I mean merely as far as regards his legs and feet); and for this reason:—When travelling on turnpike roads as they are now formed, a horse has a flat and even surface for his foot to bear upon, and he might travel at a slow rate; but when turned out on hard and uneven ground, abounding with holes, cart-ruts, &c. with the privilege of choosing his own pace, injury is frequently done to the cartilages of the foot which is never afterwards removed. My experience has led me to believe, that in most hunters of a certain age that have been ridden hard over a country, there is more or less of ossification of the cartilages of the fore feet (as well as the large flexor tendon which passes over the navicular bone), owing to the violent inflammation the laminæ have been subjected to in the excess of action in leaping, &c. to which these parts have been exposed. Should this not be the case, the fetlock joints of hunters are all apt to be

injured, and the ligaments surrounding them become inflamed and rigid, which accounts for their so often going *feelingly* (as it is called), though not absolutely lame, for the first hundred yards from their stable door. Stepping on sloping uneven ground immediately detects this injury; and what I have said on this subject leads me to the following conclusion, which perhaps may be new to some, and rather sceptically received by others. It is my firm opinion, however, that if horses had to travel at a moderate rate---say nine or ten miles an hour ---over a road faced with iron, *but presenting a perfectly level surface*, we should have very few horses lame in the feet. It is a well-known fact, that though they go much faster now than they did before Mr. MacAdam taught us how to make our roads, there are not half the post horses foundered in their feet at the present time that were so when ruts and quarters abounded in all roads, and the animals scarcely knew what it was to step upon a level surface, and have an even bearing for their feet. Exclusively of the fact of my having seen many horses which would trot quite sound on a level, hard road, but would be invariably lame on that which was sloping and uneven, my mind was made up on the subject by ocular demonstration in one of my own hacks, the particulars of which I will give. Some years since I was in the habit of frequently visiting a friend who resided twenty miles from his county town, but who generally rode over to it in the summer months on the market day, being sure to meet some sporting friends; and when I was at his house I never failed to accom-

pany him. By way---as he erroneously supposed---of favoring our horses, we went about twelve miles of the twenty through green lanes and fields, or what is commonly called "a bridle-road;" and we always rode fast. In those days I had a very good hack, which I was in the habit of riding long distances on hard turnpike roads, without ever perceiving any injury to his fetlock joints or feet; but it was not so after these twenty-four miles, at a quick pace, through these green lanes (in a deep country, always harder in the summer), where the foot scarcely ever was indulged with an even bearing, and the joints always on the twist. When I went into the stable in the morning I always found his fetlock joints full and sore, and he invariably went stiff and feeling upon them when first taken out. My friend, however (one of the old-fashioned sort), would never believe that the hard turnpike road was much less injurious than his green lanes, and for the reason I have already given: for which reason I again assert, that I had rather a hunter of mine were led five hundred miles on a good turnpike road than that he should be turned out for a summer's run; and here I confine myself entirely to the legs and feet. As far as the great panacea *rest* is concerned, as also his general bodily health and condition, the journey to Edinburgh would be much in his favour.

I must now return to one part of my subject, on which I have been (I think I shall prove) unfairly dealt with by one or two of the Old School, who have advocated summering hunters in the fields; and I am more anxious to do so inasmuch as it

relates to a charge of cruelty towards my favorite animal, which I should very unwillingly remain under. "How cruel," they say, "to keep a horse in a prison on a fine summer's day, and not allow him to snuff the breeze---to make his bed on his native earth---and partake of the common enjoyment of nature!" Now, reader, mark what I have to say.

For what reason flies* were sent into the world is not for us to inquire, but here they are; and one would almost imagine that a curse, like our own, was entailed upon the animals they persecute. Certain, however, it is, that their harassing properties are a considerable alloy to the common enjoyment even of those animals (cows, sheep, &c.) which are every day exposed to the noon-day sun—and this for at least fourteen of the twenty-four hours in the summer season. But how greatly must this annoyance be increased to thin-skinned well-bred hunters! and what will they not do to get away from it? I will state a case or two that came under my own observation in the course of the summer of 1825.

* It is no harm, I trust, to moralize a little even on so humble a theme as mine:—It is the idea of immortality which apologises for human sorrows, and renders our present condition in the smallest degree intelligible; but the suffering of animals is quite beyond our ken. To this, with a very considerable proportion of them, the various kinds of flies most essentially contribute. Sterne, in his *Tristram Shandy*, with his usual taste, introduces a poor negro girl in the sausage shop, with a bunch of white feathers in her hand, flapping away the flies, but not killing them. "'Tis a pretty picture!" said my Uncle Toby; "she had suffered persecution, Trim, and had learnt mercy." This comes well from a Sentimental Traveller; but, for my own part, I wish the tyrant Domitian had annihilated the race of them with his bodkin.

One of my horses, No. 4, I have already said, is more than usually terrified by flies. My helper came to me one day, and said he could not go into the box to him. Knowing him to be a fine-tempered horse, I became alarmed when I saw him rearing and kicking to a violent degree, and thought he was seized with the staggers. At length, however, I espied a fly in a certain part of his hinder quarters, which was with much difficulty removed, and he then was quiet as before. I endeavored several times to turn this horse into a paddock early in the morning and late at night, but nothing but a brick wall seven feet high would have confined him in it; and I should like to shew many of my sporting friends one fence which he came over to make his way to his stable door. All through the warm months of August and September this horse was obliged to go to his exercise *covered with clothing*, and all attempts to ride him with harriers in October were useless, as he would kick to such a degree, the moment a fly settled upon him, that it was dangerous to go near him.

Now, reader, let me ask you what would have become of this animal (No. 4) had he been turned out into some gentleman's park for the summer? Perhaps you will say he would have become used to the flies in time. We do not see that thick-hided bullocks and cows become reconciled to them, nor do I think it would have been the case with my horse; but, allowing the fact, this circumstance would not have come to his relief until he had most materially injured his legs and feet by galloping and stamping; and as to his body, I am

satisfied that it would have been reduced to a skeleton. No. 6 also, the only one besides the two I have mentioned which was turned into the paddock, came four times over the gate, though bushed up with thorns, to get back to her stable. So much then for the cruelty of keeping hunters in the house in the summer! and I think I may be allowed to say, a prison---if a stable can be called one---must lose its horrors when its inmates make such desperate efforts to return to even its solitary cells.

The late beautiful summer (1825) was a very bad one for getting hunters on in their work. The grass land was very hard and bad for legs; and in the county in which I reside (Hampshire) the fallows were so rigid and lumpy that it was dangerous to gallop or even trot horses in them; and the consequence was, that my horses were at least a month backwarder in their work than they were the year preceding, as it was the 30th of August before I could give either of them a sweat: but this is better than knocking their legs to pieces, which does not suit a short stud like mine. In the very hot weather, however, I made a few observations which are not irrelevant to my present purpose---particularly as to the charge of cruelty in keeping hunters in the house in the summer. On the 24th July---one of our hottest days, and I fix upon it as being sixteen days after my horses were stalled for the winter---the thermometer was one degree higher at two o'clock at noon in my two four-stall stables---in each of which three horses had stood and slept for those sixteen days and nights---than it was in the entrance-hall of my

house, which is twenty-three feet high, and contains three large windows and six doors, and the aspect due East. Now, will any one tell me that the most tender animal---even a delicate hysterical young lady---could be injured by breathing such an atmosphere as this? But this is not all. I removed the thermometer on the same day, and at the same hour, into the shade---giving it the advantage of being close to a piece of water---and there it was *four degrees higher than in my two four-stall stables!* Here then the wise objection to horses standing "sweating in the stables in the summer time," returns to its native insignificance.

It may be asked whether I took any pains to keep my stables cool? I answer, none, but those which are within every man's reach. I opened the air-valves over the horses' heads; took the casements out of the windows, and darkened the stable as much as I could by placing old horse-cloths against the windows, which latter method very much contributes to keep flies from entering, as we know they will not play in the dark. Against another summer, however, I mean to be provided with straw mats, to fit the open parts of the windows, which, if made thin enough, will sufficiently admit external air, and, by being dipped three or four times a day in water, will, by evaporation, greatly cool the internal air, as well as completely defeat the flies.

Owing to the multiplicity of stables which my horses are likely to inhabit in the course of this winter, my object has been to keep them as cool as I could; consequently I did not put the casements

into my stable windows until the fifth of September, when the thermometer suddenly dropped to 52 in the shade; and I kept them naked till the nineteenth of that month; and they now only lie in a single rug, with three panes of glass out of each window in their stables. The thermometer in the stables this day (November 18th, 1825), is only at 56, three or four degrees below what I should wish it to be, if my horses were to be stationary. This cool treatment, however, turns to account; for they are just returned from a week's residence in a wretched stable, but no ill consequences have ensued; and this is a bad time of the year for such experiments.

When in Leicestershire last season, Sir Harry Goodricke asked me my opinion of firing the hunter. Now, although I intend to treat upon this part of our stable discipline as I proceed with my subject, I told Sir Harry that I scarcely felt myself justified in giving a decided opinion on the effect of firing, as I did not think I had had a dozen horses fired in the course of my life. I certainly have had wonderful luck with the legs of my hunters; and I attribute it to causes which I must not now stop to describe; but among the chief are, the frequent use I make of alteratives---keeping away general as well as local inflammation (the principal causes of almost all disease); also never hurrying my horses in their work, when first getting into condition;---(the late Sam Chifney was of opinion that there was as much art in training horses' *legs* to stand work, as in training their bodies to run;) ---the frequent use of bandages, and a loose place

after work; and, lastly, the absolute rest* I give them in the early part of the summer, which enables the limbs to regain their almost primitive tone and vigour. There are cases which I shall hereafter speak of, in which firing, however skilfully performed, is of no avail; but in justice to the operation, or rather to the necessity for it---for it is a sharp one---I have no scruple in saying, that, *when properly executed* (but the task is frequently difficult), it succeeds much oftener than it fails. It so happens that I have two horses in my possession now that I have fired since I have possessed them; one because the sinews were about to give way, and the other because the legs always filled after a hard day, with occasional symptoms of lameness---all of which symptoms have since disappeared; and in the other case the operation completely succeeded. Nevertheless, when it can be avoided it should never be had recourse to; and the present system of mercurial charges, applied in the summer time to horses' legs, greatly diminishes the necessity for it. Mr. Field, of Oxford-street, makes these charges in a strong adhesive form---pitch and other things being applied; but, by Mr. Kueny's (of Nottingham)

* Osmer, a farrier of great celebrity in the early part of the last century, whose authority has never been doubted by any one, has this forcible passage on the effect of rest, p. 74, edit. 3. "With respect to rest, the farrier has a great advantage by blistering and firing, because the leg is so inflamed hereby that it is impossible to ride the horse for a considerable time after the operation; so that if he happens to get sound it is generally thought to be the effect of blistering and firing, which ought, in reality, to be imputed to the rest he has had."

direction, I applied the common mercurial* plaster of the shops to the fore legs of one of my horses, to which some attention of this sort was necessary, and the result was quite satisfactory. In all recent cases of enlarged joints, or tendons a little out of their place, nothing can be better than this application—mercury, we know, being the most powerful absorbent we have. The plaster is made up according to the London Pharmacopœia, and to be had at all druggists' shops at five shillings per pound. One pound makes a charge for two legs, and it is applied in the following manner: the ointment is melted and put on warm—some deer's hair being stuck on it, as in the case of common charges. Each leg is then pretty tightly bound with a linen bandage, which is sewed on the leg, and cut open in the front at the expiration of fourteen days, and opened, in part, sooner, if the legs appear to swell. By Mr. Kueny's advice I repeated this charge at the interval of a month, and I strongly recommend it (or Mr. Field's, which I have also seen applied with equal success) to the notice of all my brother sportsmen. If it answers the purpose of saving legs from giving way, and removing enlargements, equally with the actual cautery, every man of common humanity will rejoice—to say nothing of the advantage gained in not blemishing our horses.

The reader must be aware of the disadvantage I labour under in treating of so many subjects in so limited a space; they must expect, therefore, that I shall have occasion to return to some of them at a future opportunity---particularly the

* Ask for the mercurial plaster, and not mercurial ointment.

preparing hunters for their work, with the least possible expense of legs, which can only be done to advantage with horses of a gross habit of body by the effect of alterative medicines. As the hunting season, however, is now commenced, I wish to guard my brother sportsmen against an evil which has deprived me of three good hunters in my time; but which might have been avoided if proper precautions had been taken---I mean fever in the feet, and other inflammatory attacks, produced by severe work with hounds. I do not so much address myself now to those persons who keep first-rate grooms, as they are generally awake to this danger; but many of my brother sportsmen, who, though equally fond of the sport, and desirous of keeping in the front rank, may not have that advantage.

After a severe day every horse ought to have some gentle medicine, if it were only to keep off fever, and bring him sooner into the field again; and, in general, the alterative ball recommended in a former letter (*p.* 253) will be sufficient. Should he, however, appear much distressed, one of the following balls should be given, which, by its stimulating quality, and its general effect on the secretions, will greatly tend to restore him, and prevent ill consequences:---

Ethiops Mineral.....8 ounces.
Diapente .....8 ounces.
Balsam of Sulphur ...8 ounces.
To be made into sixteen balls.

The above, the reader will observe, is one of the old-fashioned recipes, but they may be assured

of its good effects. It was the favorite nostrum of the noted Mr. Perry Wentworth, and was given to me by Mr. Peacock of Basingstoke, who has attended my stables since I have resided in this country.

Bleeding should not be had recourse to unless symptoms of danger appear; and though glysters on these occasions are recommended, I do not think they are of much use, as they do not reach the cause. What I here recommend, it will be observed, is chiefly a preventive, but which, if I had adopted, might have saved me three valuable horses.

I have not said all I wish to say on this subject.---The fore-feet of horses after severe days should be well fomented, and put into a large bran poultice at night. Bole ammoniac should be sprinkled over the poultice just before it is applied, which prevents its softening the frogs. If any soreness appear in the feet when the horse goes to exercise in the morning---which is apparent by his placing the greater part of his weight on his hind legs---he should be immediately bled in the foot-veins, which is a very simple operation. All this is on what is called the prophylactic system; or, in plainer English, on the good old principle that "a stitch in time saves nine."

I conclude my present letter with the following hint:---Last autumn twelve-month I purchased a mare at Messrs. Tattersall's for thirty-nine guineas. She was the property of Mr. Payne, of Selby Hall in Northamptonshire, and, as I afterwards learnt, was sent up to be sold for what she would fetch,

being a tremendous puller. On getting her home I tried her in all the bridles I was possessed of, but could make nothing of her, and was on the point of sending her back to the hammer, to get what I could for her, when a thought struck me that I could try what my saddlers, Messrs. Whippy, could do for me Being a man of few words on these occasions, I wrote them the following note:---"Brown mare *versus* Nimrod; you know what I mean." They immediately sent me down the fac simile of the bridle Mr. Lindow used to ride The Clipper in, which is in the following form:---The length of the cheek is nine inches; that of the port two inches and a half; and there are three players hanging down over the tongue, which prevent the mouth from getting dead. When I first rode her in it she attempted all her old tricks, (Mr. Payne told me, in Leicestershire, that she ran away with him over three gates before he got a pull at her,) rushing at her fences, and running her head anywhere; but she soon found out that she was mastered, and I now ride her in a common bridle with the greatest ease. When Mr. Chadwick saw me on her one day last season with Lord Anson's hounds, he observed, the Clipper was the only bridle that was ever made for a hard pulling hunter, as, with all its severity, it never produced a dead mouth---which I certainly found to be true. Of course it requires a light hand, or danger would attend it at fences.

LETTER XVIII.

CONDITION OF HUNTERS RESUMED.

May 18, 1828.

It is upwards of two years since I wrote my last letter on this interesting subject, but I now intend to pursue it to its conclusion.

In these my labours I am encouraged and solaced by one reflection. Four seasons have now elapsed since I awakened the attention of my brother sportsmen to a different treatment of their hunters at the various periods of the year; and I have never yet had this cast in my teeth---"*I have tried your plan; I have followed your directions in my stable; but I have received no benefit therefrom.*" On the contrary, I have had assurances out of number of the excellent and permanent effects derived from a steady perseverance in them; and, as Truth is called the daughter of Time, I think I am justified in coming to the conclusion---that I AM RIGHT. Certain is it, I have had some opponents; but theory alone has been brought to bear against me, and that could not stand long*.

* I am bound to say that one heavy weight and well-known hard rider told me, two years ago, he should take up his pen and oppose my in-door system. As he is well capable of doing justice to his subject, I wish he had done so; at the same time he would, I hope, have told us of "the *very bad luck*," as it is called, which he has had in his stable for some years past, but to which I give a very different appellation.

Classically speaking, we might as well give the preference to the historian Livy's eloquent account of Hannibal's celebrated Passage of the Alps, to that of the soldier Polybius, who personally explored his route.

Now, lest I should be deemed presumptuous, I shall take this opportunity of counteracting such an impression. About two years back a hard-riding Warwickshire sportsman addressed me thus:---"We are highly indebted to you for *your* excellent plan of treating hunters in the summer."---"Pardon me," I said; "it is not *my* plan; it was known and practised before I was born."---"That might be," replied my friend; "but to yourself is due the credit of having made manifest what was not made manifest before." This, then, is the credit I take; and here ends my preface.

I am not aware that, at the present moment, I have anything very particular to add on the subject of summering the hunter---nothing certainly as far as theory can direct me; but a little practical matter must always be welcome to those who have studs. At the conclusion of last hunting season (*i. e.* the season of 1826 and 1827), I hired Thomas Morris, Mr. Hay's groom, for the Marquis of Cleveland; and having heard from several of the very superior condition of Lord Cleveland's hunters this last winter, I wrote to Thomas Morris to know how they had been treated in the summer, and I here transcribe his answer:---"January 2, 1828. My stud is looking as well as any I ever saw, and all the gentlemen in the country praise them much. I have not a lame horse among the

twenty-three we have *here* (Newton House), which is not often the case in any stables at this period of the year. Part of the stud were kept in boxes all the summer, and the remainder were kept in stables all day, and turned out at night. Each horse had a bushel of corn per week, and came up very well. I never had horses in better condition in my life." I am proud to think that my labours on this subject have not been thrown away on so old a sportsman as Lord Cleveland.

Although in the progress of these letters I may be again called upon to revert to the ill effects of turning out horses in the summer, I shall dismiss it now with only one observation, which particularly applies *to the misconceived notion of a summer's run giving rest to a horse.*

It is the idea of immortality that apologises for *our* sorrows, and renders the present condition of humanity in the smallest degree intelligible. The sufferings of animals must ever remain a paradox; but here I had better put a finger on my lip---for I believe we are told God gives no account of his conduct to us children of men. However that they are not exempt from the general curse is too apparent to admit of cavil; and among their natural tormentors flies may be reckoned first*.

I am not going to descant upon every species of the fly, from the gnat which plays in the sun beam to the pestiferous zimb which depopulates countries, and whose distant hum strikes terror into the

* Virgil speaks of the moaning of cattle in a state of nature; and thus says St. Paul: "For we know that the whole creation groaneth in pain together until now."

rhinoceros and elephant, and makes them coat themselves in mail* to resist him; but simply of those well-known insects which so unceasingly annoy our horses and cattle in hot weather in this country. Now we all remember (indeed we can never forget it) the hot summer of 1826. Hot as one of its most oppressive days was, I could not persuade myself to remain in the house; and on the ninth of July, when the sun was at its height, walked down to one of my meadows, in which there were a brood mare, two two-year-olds, and two yearling colts. There was water---a running brook---in the meadow, and there was also plenty of shade. But where did I find these suffering animals? Did I find them in the shade, *sub tegmine fagi?* No; the *œstrus* was there. Did I find them in the water? No; the blood-suckers were there also. I found them crowded together in the middle of the field; at one time rubbing each other's heads together to get rid of the smaller flies from their ears and eyes---the latter highly inflamed; then stamping their feet with violence against the ground; then walking a sort of figure not very unlike that of a modern quadrille; and lastly---all patience under their suffering being exhausted---galloping from one end of the field to the other as hard as their legs could carry them. Let me ask you, reader, do you call this rest?

I have hitherto treated chiefly of the *condition* of the horse, and consequently of *the horse in a state of health*. It will not, I am sure, be expected

* They roll themselves in mud and mire, which, when dry, coats them over like armour. The prophet Isaiah speaks of this fly.

that I should enter into what is technically and correctly termed the pathology and physiology of this useful animal; or the anatomy of his all-complicated but wonderfully formed frame. It would, indeed, be presumptuous in me to attempt to do so, and shall let that part of my subject remain in the hands of those who, by education and experience, are alone able to handle it with effect. No; all I shall attempt will be to point out some of the most usual causes of rendering good horses valueless---adding to my observations the result of full thirty years' experience of the nature and value of the various attempts to counteract and remove them; but dwelling more particularly on what is too often lost sight of, namely, the *causa causæ*, or predisposing cause. "*Est benignum, et plenum ingenui pudoris, fateri per quos profiteris*," says Pliny; and I am bound to declare, that when travelling beyond the limits of my own experience, I shall trespass pretty freely on the pages of others---particularly on those of Mr. William Percivall, whose *Elementary Lectures on the Veterinary Art* I have read with unbounded pleasure; and Mr. Goodwin's valuable work on *Shoeing and Diseases of the Feet*, to which I have previously alluded. Exclusively of the excellent information Mr. G.'s book contains, it claims great merit for the plain and comprehensible language in which such information is conveyed to us.

Amongst the most prominent and frequent of "the curses on good horse-flesh" are the following, which I have arranged alphabetically, it being my intention to notice them all in their turns.

Wishing, however, not to alarm the sensibility of the reader, I beg to state that some of them will be very slightly passed over.

Apoplexy, Staggers, Vertigo, or Megrims.
Broken Wind.
Bangs and Blows.
Broken Knees.
Blisters.
Bowels, inflamed.
Bleeding.
Blindness.
Cold, Cough, recent and chronic.
Corns.
Curb.
Cholic.
Coat and Clipping.
Cutting.
Crib-biters.
Capped Hocks.
Disease, hereditary.
Distemper, at all ages.
Docking.
Foot-lameness and Shoeing.
Farcy.
Fever.
Firing.
Grease.
Glanders.
Humours, local and general.
Inflammation.
Lampas.
Lungs, inflamed—at all ages, at all periods of the year, and in an all situations.
Legs, big.
Nerving.
Physic.
Roaring.
Ring-bone.
Rowels.
Stables.
Sinews.
Sore Backs.
Spavins.
Splents.
Staked Horses.
Strangles.
Strains.
String Halt.
Salt.
Salt and water, its effects on legs.
Sand-crack.
Teeth.
Thorough Pin.
Thorns in Legs.
Wind.
Ditto, thick.
Windgalls.
Worms.
Yellows, &c. &c.

APOPLEXY, STAGGERS, VERTIGO, OR MEGRIMS.

I never had a horse afflicted with staggers, but have seen several. I take the complaint to be generally the effect of a distended stomach, caused

by a bad digestion, and obstructions in the alimentary canal, creating an impulse of blood to the head. It is sometimes also occasioned by worms. A careful groom will always foretel an attack, and ought to prevent it: but should it be otherwise, very copious bleeding is all that should be attempted until medical aid arrives; for it is a disease which requires very vigorous measures, and is altogether of an appalling nature.

Affections of the brain and convulsive disorders are by no means of rare occurrence in horses; for instance, the vertigo, or megrims, in coach horses---although from a more judicious mode of feeding we see less of the latter than formerly. Such horses are unsafe either to ride or drive; but it is not always that the affection is apparent at first sight, and frequent impositions are the consequence. I saw a mare last week whose brain I knew had been very considerably affected. I had her brought out for my inspection; admired her action much; and, had I not been apprised of it, I question whether I might not have overlooked a convulsive twitch of her head, which she gave at about every tenth stroke in her trot, which was perfect.

By way of strengthening my assertion, that disorders of this nature proceed from bad grooming and irregular and improper feeding, I extract the following passage from Lecture 76 of Mr. William Percivall, on Staggers, and hope the lesson will not be lost on the reader:---

"Soon after my father entered the service of the Ordnance, at Woolwich, it became the custom there to turn horses, who had become low in con-

dition, and stale upon their legs from work, into the marshes to recruit their strength. During the months of July, August, and September, no case was more common than an attack of staggers among those horses; which my father attributed to the luxuriant pasture they were suddenly turned into (which invariably loaded them with fat, and consequently plethorised their systems), combined with the dependent posture of the head, and the sultry heat they were exposed to in marshes destitute of places for shade."

I once was possessed of a hunter which had had a slight affection of the brain, but I did not know it at the time. He twitched his head in his slow paces much like the mare I have been speaking of; but no excitement was left, and an admirable hunter was he. I purchased him for thirty pounds; and, after summering him well, sold him to the Honorable Mr. Bathurst, who was then on a visit at Heythorpe, for one hundred and thirty, having previously christened him "Kingham," in consequence of his carrying me in capital style over very severe ground, called Kingham Field, in Oxfordshire---jumping the brook at the extremity of it at the finish of a very sharp thing with the Duke of Beaufort's hounds.

BROKEN WIND.

Here is another stomach case. However, after a horse is once broken-winded, it is almost a waste of words to say much about him. The only cure is the copper; for as Mr. W. Percivall (Lecture 38) says, "Regarding the horse as the slave of man, if

his wind be organically impaired, he is useless to his possessor: he may be blind, lame, farcied, and even glandered, and yet continue in some measure serviceable; but no sooner has his respiration become constitutionally embarrassed than he is found to be incapable of undergoing farther labour."

What broken wind really is, appears to me to be still somewhat of an undecided point; neither have dissections, by the most skilful practitioners, by any means solved the problem. The best proof of this is to be found in the several views taken of it by our ablest writers on the veterinary art, each differing, and some most materially, from the other. Whether the air-cells of the lungs are ruptured or not, to this moment appears doubtful; but such must have been the presumption before the complaint was christened.

One point, I believe, is allowed. Broken wind is ninety-nine times in a hundred preceded by chronic cough. Now, were I a groom, I should have but little fear of chronic cough (from which indeed one-third of our hunters are not at this moment free); for as the said cough is in ninety-nine cases out of a hundred produced by plethora, occasioned by bad grooming, improper food, and inattention to the state of the bowels, I should know what I had to contend with, and, by regarding it as the warning voice, steer my course accordingly.

Mr. W. Percivall says (Lecture 38), "Exercise---at least laborious and *unprepared-for* exercise (an excellent epithet this)---is an obvious source to which we may trace this disease (*i. e.* of the lungs)." Nothing can be more true than this:

yet my experience has never presented me with an instance of a man taking his unprepared horse into the field, and (although thousands have been killed by it) *riding him with hounds until his wind was broken.* It is certainly a general impression that a horse's wind can be broken by hard riding up hills, &c., and I remember when I was of that opinion myself, but I soon renounced the error. Mr. P. here only alludes to the cause, or source.

Most veterinary writers attribute this disease to the consequences of high keep. Here, no doubt, they are correct; *but if good grooming were not for the most part a match for the effects of high keep, what would be the fate of our race horses, which eat almost as much corn as they can swallow from the first month of their existence?* Amongst them a broken-winded horse is a rarity.

If a man has a broken-winded horse in his stable, and (which is often the case) still finds him serviceable, he tells him, almost as plainly as if he could speak to him, what treatment to pursue. He is thirsty: then keep off symptomatic fever by attention to his bowels, &c. He breathes with difficulty: then diminish the circulating power by the same means, and keep him in a well-ventilated stable, and short of food before work.

I have reason to believe there is a great similarity in the suffering of a badly broken-winded horse and the human asthmatic. A very intimate friend of mine was violently affected with asthma for fifteen years of his life. Although the horse never recovers his natural health when once he becomes broken-winded, my friend got rid of his

asthma about twelve years back, and has enjoyed excellent health since. He attributes his recovery to going to India with his regiment; but he has frequently told me no earthly consideration would tempt him to accept of existence accompanied by that disease.

Now when we consider, first, how great are the restorative powers of the horse, and what able hands the veterinary art is in, we may marvel at no cure being found for this too-frequent grievance. But so it is; and so will the disease be perpetuated as long as horses are made use of and domesticated by man; and, I think I may add, as long as the world stands. In a state of nature it does not exist; therefore it behoves every one who can afford it to put to death badly broken-winded horses, for we may be assured their suffering is great.

BANGS AND BLOWS.

Sportsmen are necessarily exposed to these evils in their stables. If the injury be on the sinew, and severe, the safest way is to give up the horse for the season, or it may be necessary to give him up for ever. Blows on the sinews are very serious grievances. My treatment has always been this: A dose of physic, and foment till inflammation subsides: then gently stimulate; and if any enlargement remains after the horse gets to work, I have the leg bathed twice a day in a pail of cold water in which a double handful of salt has been infused. The stimulant has always been Lemon's Essence (diluted with brandy or rum), of which I have

used some scores of bottles in my time. The saturnine poultice of Mr. White is often applied with effect.

It may be here remarked, that giving up a horse for the season is pleasanter in theory than in practice. Admitted: but in the end it will prove economy; and let it be remembered, that in all stables of hunters which are ridden anywhere near hounds, the calculation scarcely admits of not more than four sound horses in five. When at Quorn last, I took the trouble of comparing notes on this head; and I found only about every sixth horse out of work, which I considered a very moderate share for horses that belong to hounds.

BROKEN KNEES.

I have little to offer here. The first two hunters I ever possessed having broken their knees on the road, made me careful in the use of knee caps for travelling, when the mischief generally occurs. I can remember when these things, called knee caps, were a constant source of torment, not only for ever coming loose and slipping down, but seriously injuring the skin in wet weather, and, consequently, dirty roads. Since I have used those made by Messrs. Whippy, which are elastic, nothing of the sort has happened; and, as far as the action of the joint is concerned, a horse might be ridden over a country in them. So much for "the march of intellect," which in this instance has benefited us.

I have no faith in the various nostrums for the

cure of broken knees. When inflammation is subdued we must trust to nature for the rest, with the exception of its being advisable to blister mildly, in the apprehension of any enlargement of the parts, which will happen if the injury have been extensive. Hair is easily reproduced, provided nature be not violated; but if it be, a blemish is the result. Mr. W. Percivall tells us (Lecture 33), "that if the *rete vel corpus mucosum*, which consists of a fine, delicate, laminated tissue, that is interposed between the cuticle and cutis, and regarded as their corresponding medium, if this part be destroyed, it is very *doubtful* whether it ever be regenerated." He says it is the opinion of some that it never will, though he himself holds the point in doubt; but, adds he, "if the cutis vera, and consequently the bulbs of the hair, be injured, a scar, or bare place, is the consequence---a few light-coloured or white hairs only growing upon the place, which appear to be the offspring of defective pulps."

A sportsman thinks little of a broken-knee in a hunter, provided the blemish be not very great, or the action of the joint rendered defective by it. I remember selling a horse fifteen years back for a large price in Leicestershire---forgetting to tell the purchaser he had a broken knee until the deal was concluded, with the exception of the money being paid. Scarcely a remark was made by him on my informing him of it, and he paid me the following morning.

BLISTERS.

I never argue against the use of anything by

the abuse of it: we might as well inveigh against gold and silver at once; but I confess I am a determined enemy to the indiscriminate use of strong blisters. The legs of many horses are made of such good and lasting materials that they bid defiance to such treatment; but can anything be more absurd than the (I am sorry to say) still prevailing practice of blistering a sound horse all-fours previous to turning him up for the summer? Is not the effect of blister to excite violent inflammation on the parts to which it is applied, and consequently to relax the cellular membrane or skin? In all cases of lameness arising from weakness and relaxation of the limb, their application must be most injurious; and to their use do I attribute the ruin of many hundreds of English hunters. Add to this, the common method of applying blisters (as a practical writer observes) cannot be supposed to do any real service; no advantage can possibly accrue from merely irritating the surface of the skin. In order to render them effectual they should be repeated till healthy pus is obtained.

I was pretty effectually cured of the indiscriminate use of blisters very early in life; and the lesson, having cost me a hundred and thirty guineas, made a rather lasting impression. I roused the sleeping lion, and could not pacify him again! I now nearly confine the application of blisters to bony excrescences in their *very incipient* state, among which of course are included spavins, splents, and ring-bones; also to the external surface of the body, as counteractors of internal inflammation, or counter-irritants, as they are called; and here they

avail but little unless very speedily had recourse to. If *judiciously* applied in strains, I do not condemn their use, as they serve to unload the vessels near the affected part.

BLINDNESS.

Here comes another of the curses on good horse-flesh. "Although the diseases to which the eye of the domesticated horse is obnoxious," says Mr. W. Percivall, "when compared in number with the many set down by opthalmic writers to the organ in man, are certainly very few, yet there is one among them that has proved in all ages of veterinary medicine so pestilential, and that even at the present day so obstinately pursues its end in spite of all remedial measures, that this of itself is a sufficient reason for us to become well acquainted with the anatomy and physiology of the eye, and pay more than ordinary attention to it in a state of disease." It is scarcely necessary to observe the writer here alludes to *cataract*. Now it may with propriety be asked, why not remove a cataract from the eye of a horse as well as from that of a man? *My* only answer is, it has been tried, and found to be impracticable; but Mr. W. Percivall plainly tells us why. In the first place, a horse in spectacles would be awkward even on the road (among blind ditches particularly so); and, after the loss of the natural lens, art must supply the deficiency. In the second, cataract being almost invariably a sequel of inflammatory action, and various other parts being at the same time likewise the seat of

disease, it is rarely unaccompanied with morbid alterations in other textures: in fact, adds he, it too often happens that there is a total disorganization of the whole globe. Unless, therefore, we can perform miracles as well as operations, and restore all these altered parts to their pristine condition, we had better never think of handling a cataract knife.

Now, although two years ago I had it in my power to state that up to that period I never had had a hunter go blind in my possession, yet I consider this in some measure fortuitous, and will not suffer it in the least to diminish the caution necessary in purchasing highly-priced horses. Of course, although I was *once* careless enough to give two hundred and twenty guineas for a horse which had a small cataract in one eye, I have for the most part examined the eyes of, horses I have been about to purchase most minutely, and with what little skill I am possessed of, in reference to that delicate organ; but I am decidedly of opinion that none but professional men are able to give a true judgment upon it, and even theirs can only safely apply to its present state. "In these inspections," continues Mr. Percivall, "we should not depart satisfied with barely looking into the organ: we ought to compare one eye with the other; mark the prominence of the *membrana nictitans;* the transparency and convexity of the cornea; the pellucidity of the aqueous humour; the colour and brilliancy of the iris; the colour, figure, and size of the pupil; the magnitude, blackness, and prominence of the *corpora nigra;* and last, but not least, of all, repeatedly

mark the activity with which the pupil alters its dimensions on suddenly admitting light to the eye. Surely this will convince us that we private gentlemen are incompetent to this task*.

The following are stated by Mr. P. as unfavorable prognostics:---a sunken or gloomy aspect of the eye altogether, compared with the other; prominence of the *membrana nictitans;* a watery state of the eye; dimness of the cornea, particularly around its margin; dulness or discoloration of the iris; *corpora nigra*, yellowish or spotty; pupil smaller than the other, perhaps hazy or milky, or containing a minute white speck in its centre, which is incipient cataract.

Now then for my own experience on this subject, if that be worth anything; and it amounts to this: Were I to go into my stable in the morning, and perceive an eye of one of my horses closed up, with evident signs of inflammation, but without being aware whence that inflammation proceeded, I should say to myself, "*I'll bet ten to one that eye never gets well again.*" But should I say this in despair? No: I should bleed and physic, perhaps put a seton in the cheek---and in a few days appearances would flatter me; but in ninety-nine cases in a hundred the pleasing delusion would be all I should reap from my pains. The paroxysm would return, disappear, and return again; and so on till cataract finally closed the scene. As to

* I have a mare in my possession now, stone blind from cataract; but I could sell her to any common purchaser as sound, if he only looked superficially into her eyes.

topical applications, I hold them most cheap. Laudanum dropped into the eye will certainly allay irritation; but what chance has it to combat with this disease? Setons in the cheek, and rowels in the jaw, I have also seen tried a hundred times at least, but they very seldom answer the end. The fatal issue---permanent blindness---is almost inseparable from this species of inflammation.

Now it will not be expected that I can take up my pen on this subject, and use it without a reference to my favorite hobby---*condition*. Let us then see how far the two subjects are connected.

Speaking of this species of opthalmia, Professor Coleman was led to believe that a contaminated atmosphere, which is known to engender farcy and glanders, sows the seed of disease in the present instance; and that horses running wild, and breathing the untainted open air, are never thus affected. The Professor, however, qualifies this assertion by saying, "*he* never saw such a case;" but I can tell him I have seen many. I have had two cart fillies go blind within these last two years, which were never in a stable in their lives until affected with the disease, which has resisted all attempts at removal. This leads me to observe, that *here* it must have been *a constitutional disease*---constitutional in its origin, but local in its consequences.

I have, however, very little doubt but this destructive disease may, like most others, be traced to a derangement of the digestive organs and the skin, and therefore affords additional excitement to good grooming in the stable, with nice attention to the state of the bowels Regularity of food, and

of the temperature they live in, must also be attended to if we wish to keep our stable sound; and I have little hesitation in saying, that to opposite circumstances is much of that deprivation of sight to be attributed, which horses, otherwise sound, are *at all periods of their lives* so subject to. Some of my sporting friends, who have more money to spend in horse-flesh than has ever fallen to my share, have endeavored to laugh me out of my frequent use of alteratives and laxatives; but the longer I live the more am I convinced that without their frequent use we are never sure of our stud.

Whether blindness in horses be hereditary I do not take upon myself to determine, although I could name the produce of several which have been certainly given to go blind. This part of my subject is beyond my depth, and I had better let it alone. I certainly do not see why blindness may not be hereditary as well as other diseases; and it is a well-known fact, that nine in ten of the stock of a certain horse, who unfortunately visited Worcestershire some years back, had either curbs or spavins in their hocks.

Whether or not horses are near-sighted I will not venture to pronounce, although I see no good reason why a preternatural convexity of the cornea should not exist, as in man. I certainly have had several horses which appeared not to be able to appreciate some of the commonest objects on the road until they came close to them, although they have been those of every-day occurrence; and this does not look unlike it. A hack I purchased last

year in Yorkshire must, I think, have been thus affected. *Although bred in Yorkshire*, a heap of stones by the road-side was an object of terror to him; and although I once rode him over twenty-one in succession, he shy'd when he approached the twenty-second; I have also had horses with apparently very perfect eyes which I could never persuade to leap flying.

Mr. W. Percivall says, "the loss of one eye does not enfeeble sight, because the other acquires greater energy, though it much contracts the field of vision." It is, however, said to render the conception erring; and the cause of mis-judgment of distances is the one commonly brought forward to prove this. Now the following experiment satisfies me, that as far as leaping *fences straight before him*, the loss of an eye is no detriment to a horse. I sit at this present moment with a pencil-case held just at the end of my nose, and, shutting one eye, it exactly hides from my view the handle which opens the door. I shut the other eye, and the said pencil-case just covers the back of a Dictionary in a book-case *seven feet from the door*. Here then is great error of conception as far as relates to focal distance; and if I were to follow the direction of the pencil-case it would at one time lead me to the Dictionary and at another to the door, according to the eye through which I looked at it; but when I stand *four yards from the window*, and have the pencil-case held up to one of the panes for my view, it does not appear to vary more than one inch when looked at with either eye, which cannot

at all affect a horse judging his focal distance at a fence*.

Notwithstanding this, and notwithstanding some of the very best hunters I ever saw have been one-eyed horses, I do not like them. Unless very handy, and of excellent tempers indeed, they are apt to strike trees and gate-posts on their blind sides; and where is the horse that at times does not require to have all his eyes about him? A twig, or briar, will also sometimes injure the sound eye, and then danger is at hand. Nothing, however, can exceed the structure and economy of the eye, particularly as to its protection from injury; and so careful has the Creator been that his creatures should enjoy the blessing of sight, no animal is produced with less than two. Nor is this all; although the image of every object is pictured on the retina of each eye, whilst we have two, yet we do not see the object double, but the same as if we looked at it with only one; and as each can singly perform the offices of vision, the loss of one is not so material to either man or beast.

The horse, as Mr. Percivall tells us, enjoys a much wider range of lateral vision than man, and he can direct it backwards, which the latter is unable to do. This extensive and varied view not only serves to guide him in his rambles in quest of food; but, adds he, *since his principal weapons of defence are his heels, with what certainty could he have directed their stroke without this faculty?*

* Mr. Percivall observes, that the peculiar beauty in the structure of the eye, *by which it adjusts itself to the distance of the object of vision*, forms a subject yet open to inquiry.

BLOOD VESSELS.

"One great and evident design in the distribution of arteries," says that eminent physiologist, Mr. W. Percivall, "is to direct them in their course, that they may be out of the way of injury and pressure; or else so to arrange their communications, that the pressure to which they are on occasions unavoidably subjected may not altogether arrest the circulation." Here are accounted for the very few instances we meet with of horses breaking blood-vessels, to which accidents, from the violent exertions they are put to, we might naturally conclude them most liable. I never *saw* but two: one, a hunter in Warwickshire, which---staggering a few yards from the first fence he had taken, after our fox broke covert---died almost instantly. The other was one of Sir Harry Goodricke's hunters in Leicestershire; but this was only a small vessel, and, after bleeding copiously from nose and mouth, he was, I believe, none the worse for it. Lord Chas. Somerset's Scorpion died from a broken blood-vessel, after running a severe race at Newmarket (1813); Sir John Cope's favorite old hunter dropped dead under him from the same cause; and I know two instances only of this accident happening to coach horses, both of which recovered. When any animal is put to exertion beyond the limits of vital power, the circulation of the blood in the lungs will sometimes produce suffocation.

BLEEDING.

Error has had full scope here; but when we consider that, although the circulation of the blood

is one of the most important discoveries in the whole history of physic, it has been involved in the greatest difficulties, our surprise will cease, more especially when we recollect in what ignorant hands the lancet and phleme are to be found, and often in full practice. However, as it is on the increased or diminished velocity of this fluid that health or disease depends, it is quite evident that a knowledge of those diseases which are influenced or produced by an increased action of the heart and arteries, and those which are the result of a diminution in the vital powers, must be indispensably necessary to guide the judgment in the important operation of blood-letting.

The following passage is well worthy of being impressed on the minds of all who are in possession of horses:—The erroneous opinion that bleeding can be productive of no ill consequences, can only arise from a total ignorance of the foregoing observations. The practice of abstracting blood under every circumstance (which is too common) must be attended with the greatest hazard and danger; for in all diseases attended with a languid circulation, or where there is a thinness or putrescency of the fluids, blood-letting must be highly injurious, by inducing a greater degree of debility, and favoring the disposition to gangrene or mortification. Here then is the necessity of consulting the pulse of a horse before his veins are opened, which not one groom in a hundred knows even where to find, but which the regular practitioner looks for as his land-mark.

Certain is it, that *a judicious use of the phleme*

is one of the most important operations in farriery, and our chief dependance in the early stages of acute and dangerous inflammation; for when this has been copiously resorted to, medicine acts under the most favorable circumstances, and thousands of lives are annually saved by it. Within my recollection, however, a wonderful change has taken place in this department of stable management. In the first place, periodical bleeding is entirely abolished in the modern system of grooming; and I should just as soon think of cutting a horse's head off as opening a vein unless some symptoms called for it*. "The more you bleed, the more you must bleed," is a truism no one will attempt to shake; and if you want to make a man or an animal fat and phlethoric, bleed him frequently; but it is in the quantity of blood abstracted from a horse that the greatest alteration has lately taken place, and the bold practice has been attended with the very best results. A lesson on this head was given me many years back by an eminent medical man. "Your favorite amusement," says he, "subjects you to hard blows. Never fail being blooded after a bad fall, but remember this---*there is economy in blood* as well as in everything else, and you will find it economical to lose *as much as you can bear to lose* the first time your arm is opened." I have ever since availed myself of this hint; and

* It is the custom to bleed cart horses *periodically* in my neighbourhood. Having to combat with long-established usage, I had a difficulty in preventing the practice in my own stable; but experience proves the inutility of it. Nothing tends to plethora in man or horse so much as repeated bleeding.

whenever I do bleed a horse, I take care that, with few exceptions, not less than a gallon is the quantity taken. To shew how safely this may be done, Mr. Lucas, veterinary surgeon, of Atherstone, took three gallons from a horse of mine between nine o'clock at night and eight the following morning, to save his life from an attack of acute inflammation, produced by his being ridden a severe run without being forward enough in his condition. In bleeding I prefer the phleme to the lancet---first, because it forms rather a larger orifice; and secondly, because I have known *several* accidents from the other. The phleme should be kept sharp and bright, and not (for horses) exceed 3-8ths of an inch in depth.

I confess I have never seen much benefit derived from topical bleeding; but let it not be supposed that I mean to deny the benefit of it. I only here speak from my own experience. I have seen eye-veins opened for the eyes; plate-veins for the shoulders; but in my opinion the jugular bears the bell. One hint, however, should not be disregarded---*bleed in proportion to strength and powers of life.*

CURBS.

Curbs are for the most part treated lightly by writers on the veterinary art. Mr. White affords only five lines to the subject in the first edition of his *Pharmacopœia;* but to sportsmen they are very troublesome customers. They *may* have their origin in a blow: but I think we may safely conclude, that, as hunters are more subject to them

than any other description of horse, they generally proceed from the violent exertion of the hinder legs in carrying weight, at a rapid pace, through deep ground, and also from the effect of leaping.

"The hock joint," says Mr. W. Percivall, "probably has more exertion to endure than any one in the body; and although well defended, and farther strengthened by the tendons that run over it, it is the seat of several diseases---an additional argument," adds he, "to shew its utility in progression." This accomplished writer (Lecture 30, on the Muscles of the Hind Extremity) thus describes two of the most powerful muscles in this part of the hind leg. "The extensors have nothing more to do than simply to raise the foot from the ground, and carry it forward under the trunk; the flexors have, in the extension of the hock, not only to keep the foot firm upon the ground, as a fulcrum, but to advance the whole machine, and restore the perpendicular of the hind extremities. This operation has been well compared to the impulsion of a boat by means of oars; supposing the vessel to represent the body of the animal, and the oars the hind legs, the waterman imitates the extensors of the hock while tugging at his oars, and the flexors in projecting them out of the water." I have more than once seen horses lame from injury to these muscles, but they have very soon recovered.

Curbs being produced by inflammation, followed by effusion, the means of cure readily present themselves. Common sense or reason would naturally prescribe repellent lotions, physic, &c.;

but these are only auxiliaries. The plan I have always adopted has been---first, a dose of physic, then immediately to blister (mildly), and *repeat the blister as soon and as often as circumstances will admit*. Mr. W. Percivall recommends a patten-shoe being put upon the foot of the affected limb, in order to relax the extensor muscles of the hock. I have had, as may be expected, several cases of curbs in my stable; but I have generally found them yield to repeated blistering; and have not often, that I recollect, had recourse to firing. I have occasionally worked horses whilst the disease existed, and still they have progressed towards soundness. By this, however, I do not mean to say that curbs are to be made light of---for, on the contrary, they are very much to be dreaded; and I never rode a good run, over a deep country, that I did not expect to be favored with one: and the very best formed hocks are not exempt. Mr. Percivall's Lecture on this subject is most interesting and satisfactory.

CORNS.

Of corns I have had very little, if any, experience in my own stable; and I have reason to think the disease, if it can be called one, is now nearly confined to post and coach horses, whose feet are, from their situation, unavoidably neglected, and are often shod by contract. Horses that work on limestone roads are more subject to corns than those which travel over gravel; but I was not prepared to hear they are in some measure periodical.

The smith, however, who shoes my horses, shoes about two hundred post and coach horses; and he assures me that numbers of them are affected at particular times, and at others they are comparatively free from them. "Very wet roads," he says, "are one exciting cause."

If we examine the right hand of any hard-working mechanic, we shall find what exactly corresponds with our idea of a corn. The cuticle of the palm (as in the case with the heel or the sole of the foot) grows morbidly thick by the effect of external pressure; but this is in reality a different disease from what has been so named in the horse's foot. "The only approach to a corn," says Mr. W. Percivall (Lecture 32), "that we meet with, are those horny or cuticular exuberances that grow upon the inward part of the arms. These, however, cannot be considered as morbid excrescences; for they are unexceptionably present in horses, as well as in asses and mules."

The following recipe was given me by a very old sportsman, who assured me it was *infallible*:—

> Venice turpentine, half a pound.
> Tar, half a pint.
> White rosin, one ounce.
> Burgundy pitch, one ounce.

The above to be boiled up and applied *daily* on a pledget of tow. Before applying it never fail to scrape the part with a drawing knife, and in six dressings the corn will disappear. *Credat Judæus, non ego;* but it is among the simples, and worth the experiment at least. I confess I looked for something rather more caustic.

CAPPED HOCKS.

I have nothing farther to offer on this head. It is slightly touched upon by Mr. Percivall, and his theory is plausible enough. It has not, however, been my good fortune to see it put into practice with success; and therefore I shall let it pass. In my own experience, I have never seen a capped hock reduced. They are certainly great eye-sores; but, as lameness is very rarely the consequence, they are not greatly to be regarded or dreaded.

CASTRATION.

A necessary operation with horses; but, I have always been of opinion, carried to too great an extent in this country. Mr. Percivall very properly observes that in itself it is one, the successful performance of which gains but little credit, though its unfortunate issue may irretrievably lose a man his professional reputation. "I would not operate," says he, "during the season of changing the coat, nor even just prior to that period, from fear of interrupting the process, or checking it altogether; neither would I choose frosty or sultry weather: but, above all, it is advisable to suspend the operation when the flies abound. If the subject have passed the colt period of age, I would recommend a dose of aperient medicine before the operation be undertaken, unless he should be already living on green food."

Again: After the operation, Mr. P. recommends the animal should be housed. "Turning out afterwards," says he, "even supposing that the

season, both from the absence of flies and the congeniality of the weather, permit, I am decidedly averse to. A roomy, loose, ventilated box is the best apartment for the patient, and green meat, when it can be procured, the most suitable provender. The surface of the body should be kept warm; and a purge may with benefit be administered to him. The less that is done over and above this, the better for the future welfare of the animal."

The same writer, however, very properly observes, in a former part of his lecture, that with horses who have been raced or hunted, it is a proper precaution to ascertain whether they are free from hernia before this operation is performed, its presence being by no means uncommon.

CRIB-BITING.

It has been asserted that this habit or vice, whichever we choose to term it, is more prejudicial to *character* than to bodily exertion. This is in part true; for we are all aware how many first-rate horses, of all descriptions, are crib-biters. In my own stable I am not able to state that I have seen any ill effects from the habit, but I have never had a horse very much given to it, or one which could not be in great measure prevented by a strap. However, although I last year gave one hundred guineas for a crib-biter, I have generally taken the advice which an old sportsman and excellent judge of a horse whispered in my ear many years back—"Never buy a crib-biter," said he: "*he is always getting worse.*"

CATARRH, OR COLD.

That facetious writer, Taplin, says, "if a gentleman could carry his horse in his pocket he would never catch cold;" by which he implies that neglect is generally the cause of the complaint. This being the forerunner of various and more serious diseases---inflamed lungs amongst the number---deserves very serious attention; and I well remember the old joke of a celebrated London physician, who always asked his patients, when they told him they *only* had a cold, whether they would wish to have the plague?

"The treatment of catarrh is very simple," says Mr. Percivall (Lecture 33). "If there be no concomitant febrile action, or but little, the confinement of the horse for a few days in a stable of mean temperature, warmly clothed, and fed with bran mashes in lieu of corn, with the aid of a few doses of laxative and diuretic medicine, will restore him to health; at the same time, if there be much submaxillary tumor, or any cough or soreness of the throat, an ounce or more of the *infusum lytta** should be rubbed either under the jaw or about the throttle. Should febrile irritation manifest itself in the system, from two to four quarts of blood may be detracted, and either what I call the sedative ball exhibited, or hellebore in combination with aloes. Many practitioners are in the habit of bleeding, almost invariably, in catarrh; still it is often uncalled for. When there is much reddening of the membrane, with but little discharge, and a dry hard cough, I am an advocate for it. There is

* Cantharides.

certainly one advantage in bleeding early, which is, that it is seldom necessary to bleed again. The blister, in most cases, should be repeated about once or twice a-week."

On chronic catarrh, Mr. Percivall thus ably expresses himself:—"The duration of the acute or inflammatory symptoms of catarrh, even if the disease be allowed to take its course, will seldom exceed ten days or a fortnight; but then it is very apt to run into the chronic or third stage. The animal feeds well, is in good spirits, and appears to enjoy health; and yet a copious efflux of thick, white, and perhaps grumous matter shews itself at the nostrils—now and then only at one of them—which nothing we can employ, either locally or generally, seems to have any influence on. This gleety condition of the membrane is now and then followed by unequivocal symptoms of glanders. The remedies I have generally had recourse to here are—some tonic drench, occasional doses of laxative medicine, a rowel under the jaw, two or three feeds of beans in the course of the day as a substitute for corn, and moderate exercise in the open air. In cases in which cough and tenderness about the throttle have been connected with the gleet, I have experienced good effects from the application of a blister along the course of the windpipe, from the jaw nearly to the sternum, and its repetition once a week."

COLIC.

I have now to touch upon a very interesting subject with all who possess horse-flesh, inasmuch

as considerable difficulty is apparent to all but regular practitioners in deciding between the symptoms of what we call colic, gripes, or fret, and that still more dangerous complaint, enteritis, or inflammation of the bowels---for it must be confessed that to common eyes they are very much alike, but require very different treatment. Previously then to aid being called in, it may be useful to distinguish these symptoms.

"An attack of gripes (which consists in a spasmodic contraction of some portion or portions of the intestinal canal) is most commonly quite sudden; the malady makes its appearance without any precursory or even accompanying febrile commotion. Although the pulse is accelerated during the paroxysms of pain, fever is neither a precursor nor an early concomitant, nor is there any other symptom of ill health. Let it be observed, however, that the pain subsides at intervals, *which is never the case in enteritis.* Some will insist that the horse rolls upon his back in the former, but never in the latter complaint; but this must not be depended upon as an unerring guide. The proximate cause of colic is a spasmodic constriction of the small guts; and although drinking cold water in hot weather will sometimes produce it, indigestible food, green meat, or musty hay in particular, is the general predisposing cause."

My own experience confirms what I have now quoted from Mr. Percivall. Among my cart horses (ten in number) scarcely a month in the year elapses without one of them being attacked with colic, excepting when they are eating barley straw

instead of hay; *for barley straw is remarkably easy of digestion.* My remedy, however, is always at hand. I leave a bottle of oil of turpentine within reach of my wagoner, labelled with this inscription; and which I never yet knew to fail: — "Two ounces of this to be given in a pint of warm gruel, for the fret*."

I learn from Mr. Percivall, that this is recommended at the Veterinary College, but that his father adds to it one ounce of tincture of opium. I highly approve of this, and very lately put it to the test. A neighbouring farmer had a horse which had been in an agony from the fret for nearly ten hours, and in his absence my assistance was requested by his son. The turpentine alone did not remove it so soon as I expected; but the laudanum, combined, did. So intense had been the animal's sufferings that I took a gallon of blood from his neck, apprehending inflammation; which operation, though not generally recommended, is, I think, on the safe side, *venesection itself being*, as Mr. P. observes, *an anti-spasmodic*.

I have a very high opinion of the medicinal effects of oil of turpentine in many diseases of cattle. At the recommendation of an eminent Dorsetshire grazier I have given it to cows and other horned cattle with the best effect, and particularly as an alterative when they are not doing well. I also administered it to two hoven, or blown, cows, and found it very beneficial.

* In my younger days cordial carminative medicines were generally employed to remove this disease, but they often failed, and were troublesome to administer.

I must do Mr. White the justice to say he has (*p.* 41, sixth edition) very plainly laid down the distinguishing symptoms of flatulent colic (or gripes) and enteritis, which cannot well be mistaken; but having always considered the latter as so dangerous and devastating a disease, it would be presumptuous in me to attempt to say much about it. Having, however, been a frequent spectator---and at my own cost too---I may be allowed to say that as, with horses in a high state of excitement, it often comes on with scarcely any notice, we should always be on the watch for it, and look attentively to the bowels. I may also be allowed to add this: If medical aid be not immediately at hand, two or three *gallons* of blood (according to the patient's strength) should be taken from the neck; a very active, but oily, cathartic *in a drink* (for its more speedy effect) should be given; clysters---raking by the hand having been first performed. BE QUICK in all your motions, and particularly in sending for the best veterinary surgeon, for a few hours often does the business!!

COAT, AND CLIPPING.

In one of my former letters I have noticed the changes that take place in the coats of horses; the effect the moulting season has on the constitution; and I have also given my opinion on clipping, and which opinion I shall never alter. The hair being a covering which Nature has provided for the skin of animals to protect them from *cold*, *heat*, and *external injury*, to deprive them of it is an outrage

on Nature, which can never stand its ground; and although the practice is on the increase, and although in some individual cases I do not condemn it, yet, generally speaking, it is nothing but a substitute for bad grooming and idleness.

Mr. W. Percivall's "Lecture (32d) on the Hair of the Horse" is extremely interesting to any one who has curiosity to inquire into the wonderful operations of Nature, and the coat of this animal holds a conspicuous place even there. Why a horse should change his coat *twice* every year it is not for us to inquire; but in what manner the change is effected may not be unworthy of detail.

A hair, it seems, is composed of three parts---the bulb, the root, and the stem. At moulting time the pulpy substance at the root of the hair shrinks and dries up; the stem, consequently, no longer supplied with nourishment, loses its support and falls off; at the same time a new pulp appears by the side of the old one, which, during the absorption of the latter, grows and gives root to a new hair; so that the pulp and stem only, and not the bulb, undergo the process of regeneration. "The coat of the horse," adds Mr. P. "is shed twice during the year---in spring and autumn---a phenomenon exhibited with great regularity so long as the animal remains wild; but as soon as he is domesticated, this process is influenced by many circumstances connected with his stable management, though by none more perhaps than by the temperature of the stable."

With reference to the influence of colour on horses' coats, the following is worthy of remark :---

The three primitive colours---those of which all the other appear to be either shades or combinations---are white, red, and black. According to Richerand, the lighter the shade the finer the hair; as a proof of which, he says, there are fewest *black* hairs in a square inch of skin, more *chesnut*, and most *light-coloured*. "This assertion," says Mr. Percivall, "our observation appears to confirm; for it is comparatively uncommon to meet with a *black* thorough-bred horse, though it is a very prevailing colour among cart horses; and the glossy silken coat, for which the former is so much admired, is in none more conspicuous than in those that are light-coloured."

The *effect* of a good dressing on the coat of a horse, ripe in his condition, is too well known to require even a word; but the *cause* may not be apparent to all. It seems there is an unctuous matter emitted from numbers of that infinity of pores which the skin has on its surface, which keeps up a constant greasiness of it; and this abounds so plentifully in those parts subject to friction, such as the bend of the knee and hock, as often, from want of cleanliness, to generate a troublesome disease. Warmth and friction consequently contribute to the condition of the hair, by increasing the circulation of the cutaneous system; the natural consequences of which, says Mr. P., are, an augmentation of its secretions, among others of the perspirable fluid, and the unctuous or oleaginous matter* that per-

* This, I believe, is stated on the authority of a celebrated German physiologist; but other writers say the oily matter here alluded to arises from a vast number of sebaceous follicles.

vades the hair. This gives a renewed suppleness to the skin, and a kindly feel and gloss to the coat.

I am happy to have it in my power to quote the following passage, as it is so completely corroborative of what I have before written on this part of my subject :---" The appearance of the hair," says Mr. Percivall, " may be adduced as a sign of internal derangement. The fact is, this is one of the most remarkable instances we have of the sympathy existing between the skin and the alimentary canal ; and we might *ad infinitum* bestow our labour upon the former without effect, unless we were at the same time to direct our attention to the latter. Here a dose of physic, or, *what is better*, *some laxative medicine*, is required to render the currycomb and brush availing in polishing the coat of the horse."

On the occasional stare of the coat this accomplished writer is worth hearing :---" Simply taking a horse," says he, " into an atmosphere colder than the one he has been habitually exposed to, will make the hair stare. Now this can be no other than the effect of contraction, not of the skin itself, but of the muscular fibres which adhere to it---the *panniculus carnosus*. In truth, it is something similar to what happens in the erection of the bristles, though that is a voluntary act, while this is not dependent on the will. In the one case cold is the stimulus to contraction ; in the other, volition."

I know of nothing to add on this subject, except the remark, that, although the coats of entire horses are universally finer than geldings, yet I know of no superiority in this particular between geldings and

mares. From the nature of mares being *entire*, we might have looked for a different result. The question why *blind* horses generally have a fine coat in winter and a rough one in summer, must, I suppose, continue to remain unanswered.

CUTTING LEGS;

Or *Interfering*, as it is called by some. I think owners of horses troubled with this great fault are not sufficiently aware that striking one leg against the other is often a defect of the upper, as well as the lower extremity of the leg. In choice of young horses I have carefully avoided those which hit their legs, particularly the hinder ones. The speedy-cut often arises from excess of action, but knocking the hind legs together is an infallible sign of weakness. Shoeing may remedy it a little; but a plain leather boot is most to be depended upon; for, as Bracken observes, "a goose will always go like a goose."

DISTEMPER.

As in dogs, so in horses, this complaint remains among the secrets of physiology. It is a species of epizootic* catarrh, more particularly confined to racing stables, and to those of London and Westminster; although horses in the country, and in the most airy situations, are by no means exempt from it. Thousands of good horses are destroyed by it every year in England, but its virulence is not always equally destructive.

* The word epidemic is improperly applied to diseases of cattle. It is from the Greek επι δημος, on the people: *Epizootic* is the proper word here.

The distemper has been raging throughout the present spring (1828), the almost natural consequence, I believe, of long-continued easterly winds. I have a mare ill with it at this moment, and I may as well describe her case. I had ridden her twenty-five miles to dine with a friend, and as I was returning next day found her unusually dull for the last five miles, coughing only once. On offering her water I found she had a difficulty in swallowing *when her head was lowered to the stream*, which immediately directed me to blister her throttle as soon as I got home, and the next morning she lost a gallon of blood. She has, up to this moment (June), been labouring under the disease for sixteen days, during which time she has not drunk two pails of water. This, however, is immaterial; for she has lived on sloppy mashes and green meat, with occasional alteratives, so that she is not much reduced in condition. Although her throat, in spite of four blisters, was excessively sore, I never considered her in danger, because I kept off fever by a cooling diet; and here, I think, is the great secret in this complaint. She now goes out to exercise, although she is weak, and lies down half the day; but in a week or ten days, with the help of a cordial ball or two, I expect she will be as well as ever. Here, it may be observed, the disease was met in its very early stage, which is a very great advantage; and she breathed fresh air. Had she been in a close London stable I think it would have gone hard with her.

DISEASES HEREDITARY.

A certain writer on these subjects, who in his

day obtained some celebrity, but at the present time would be thought lightly of, speaks of the grease in horses being transmitted by hereditary taint of sire or dam from one generation to another. Without going quite so far as the writer I am alluding to, it is my firm conviction that breeders of horseflesh do not sufficiently attend to the point in question---hereditary disease. That blind horses and mares produce stock disposed to go blind, no one, I think, can doubt. Such stallions as Countryman, and twenty more besides, would set the matter at rest on that head. Mary, by Precipitate, produced three roarers by three different sires; and even one of her produce, when put to a fourth horse, produced a roarer, and one of the worst I ever heard in his work. It is well known that Waterloo has a club-foot, and some of his produce have club feet*. Curbs, spavins, and splents we also know are entailed on the progeny of various otherwise good sorts of horses; and although these may sometimes have their origin in mal-formation of the frame, yet that does not alter the matter at all. This, however, is not exactly the case with legs---some of which (as with the Sir Peter blood), however good to look at, will not stand training for any

* When we look at the performance of Waterloo, we may safely pronounce, that, but for this defect, he would have been the first race horse this country has produced since the days of Childers and Eclipse. With respect to roaring, we all remember the case stated in 1824, by Mr. Perry, veterinary surgeon, of Swaffham, of Mr. Dewing's *Dragon*, the Norfolk stallion, whose stock inherited roaring; and which circumstance led to the question of hereditableness of roaring being put to Mr. Cline, the surgeon, who decided against it.

length of time. Although the question of heredibleness is rather too comprehensive for me to enter upon with a chance of throwing any new light upon it, yet our knowledge of animal economy, whether human or brute, confirms the point as to most kinds of diseases, as also perfect or defective conformation. In oxen, sheep, and swine, the disorders called the foul, the rot, and the husk will be perpetuated from generation to generation. As to the hereditary influence of form, I can illustrate the force of that without going far from home; my right ear has been slit by a sabre: I have two children marked in the right ear.

I have heard several persons say, they would not breed from a mare which had become groggy in her feet. I have always thought this is carrying the objection too far; for though it may be admitted, that, if the mare's feet had been more vigorously constituted, she might not have become lame in them, yet it is but too probable, that, in this case, the predisposing cause may be traced to the treatment she has been subject to, and not to constitutional defect. If I had a *good* mare of this description, I would have her nerved, and breed from her with every expectation of success.

DOCKING.

As nearly every horse used for pleasure undergoes this operation, it would almost appear a waste of words to bestow a line on the subject; but, whether it be from the consequent frequency of the operation, or carelessness after it, I do not pretend to determine, fatal accidents often arise from it.

Notwithstanding this, and the severity of the operation, we have been, I fear, too fond of it in our hunters' stables, and I am obliged to confess that taking two inches off horses' tails has now and then put fifty pounds into my pocket.

Looking to the main chance, however, I have never docked a horse of late years without giving him a light dose of physic after it, *and at least a week's rest* from anything like severe work; for a locked jaw is by no means unfrequently the consequence*. I have always applied the actual cautery to staunch the blood after the amputation of the stump, but have made it a point to stand by, and restrict the use of it as much as possible, preventing unnecessary torture. On this head I shall transcribe the words of Mr. W. Percivall, hoping they will be as deeply impressed on all who have occasion to have this operation performed, as they reflect credit on their author.

"There is only one objection that can be urged to the use of the actual cautery: some may not regard it as such, but I consider it to be one of great moment, inasmuch as it is grounded upon that which a veterinary surgeon ought never to lose sight of in the course of his practice---*humanity*. The animal will literally shriek with agony---and really in the present unskilful and barbarous manner in which that terrific veterinary surgical instrument, *a red hot iron*, is made use of, I do not know what

* In Mr. Wilkinson's (of Newcastle) report of successful practice in cases of locked jaw, nine of twenty-four of those cases came on after docking, from ten days to a month after the operation.—See *Hinds' Veterinary Surgeon*, page 414.

can excite more exquisite and poignant pain. Let me implore veterinary surgeons, then, to take this into their most serious consideration, and not to trifle with the feelings of a poor brute, who, if he could in language retort upon them, would accuse them, and with the greatest justice, of cruelty grafted upon prejudice."

Docking colts when at the mare's foot has been recommended, as, by taking the weight from the extremity of the tail, it will be carried higher when the animal arrives at maturity, and render nicking unnecessary. The latter savage act, however, is now nearly exploded; and having never tried the former, I cannot speak to its merits. The proper length for the docks of hunters, or other pleasure horses---at least those of full size---is eight inches; which, allowing for a fourth part of that length in hair, forms a fair medium between two extremes. A good tail is a great set-off to well turned hind quarters; but to my own eye nothing is more disfiguring than the *swish*, unless it be on a well-bred galloway.

Human nature must blush at some of her errors. When I was a boy, all cart horses were docked *close to their quarters*, under the erroneous impression of making them strong in the spine. At that time of day, this cruelty was heightened by it being the practice of farmers, with few exceptions, to turn out their cart horses in the summer---a system now nearly exploded in all good husbandry.

DIURETICS.

I have sufficient reason to be convinced that

thousands of horses are rendered unserviceable by the violent and indiscriminate use of diuretic balls, and particularly so when given during the time of their being liable to be put to strong work. Too great an increase of the urinary secretions very much impoverishes the blood, and subjects horses to numerous and often fatal diseases. "The horse," observes Mr. Percivall, "who rarely perspires but under exertion or pain, has probably, of all other animals, the most susceptible kidneys."

On this subject the reader had better hear what Mr. Percivall says in his 55th Lecture:—"The general use of diuretic medicines, coupled with the known susceptibility of the organ itself, renders the kidney the seat of frequent disordered function, and now and then of violent and destructive disease. The disordered function is probably the result of increased action, which may or may not amount to inflammation: if it do not in the first instance, the frequent repetition of the stimulus does not fail to give rise to it, most likely in the chronic form; and this languid inflammation, which within certain limits would die away on a total discontinuance of the existing cause, aggravated from time to time by the same injurious diuretic influence, becomes at last established, and then never leaves the parts until it has even defeated its own progress, by inducing disorganization, induration, scirrhus, ulceration, and suppuration."

Having quoted such high authority, it only remains for me to say that I have long been very shy of using strong diuretic balls in my stable, and, from a wish to avoid a necessity for them, have

been so strenuous an advocate for alterative medicines. When I do give a urine ball to a valuable horse, I generally mix some cordial ball with it; for the former produces extreme debility of the system, and frequently, by repetition, incurable diseases of the kidneys.

In the purchase of hay, and in the management of my own, I have always avoided having it too much fermented, or mow-burnt, as it is called; for, from its great excitation of the kidneys, it greatly debilitates, and produces, in coach horses, the complaint termed "*the lick*," a certain sign of a disordered stomach, and impoverished habit. Ship oats, or indeed any that have been heated and become stale, will have an injurious effect on the kidneys, and for that reason ought to be carefully avoided.

It is scarcely necessary to say that horses which sweat frequently and profusely stale but little; so little, indeed, that grooms are now and then apprehensive of something wrong, and a urine ball is the consequence. This proves the sympathy between the skin and the kidneys, and accounts for the good effect of our mild diuretic alteratives. Let me not, however, be supposed to condemn the occasional use of diuretic balls; for I am well aware of their eminent services in several complaints; and it is by their power of causing a reversion of action in favour of the kidneys that we generally remove dropsical swellings of horses' legs. They are also useful to cart horses, whose robust frames are better able to withstand them; and they are also very serviceable when an evacuant

is wanting (as on a journey), and there is not time to give physic. Carrots act as a slight diuretic with horses; for which reason they are excellent alteratives, but must be given with caution in severe work.

Much is said about the signs of healthy urine voided by a horse. The food he lives upon has so much to do with it, that it is impossible to apply any general rule. When healthy, it is of an amber colour, and of a peculiar pungent smell. It is a bad sign when a horse stales often, and in small quantities, for it indicates internal inflammation.

FEVER.

Whether or not horses are subject to what is called simple or pure fever, appears to have been a disputed point. That they are very often, indeed, labouring under that which is symptomatic, needs no confirmation; neither can they ever be long free from it whilst put to violent exertions, and subject to the various mechanical injuries they meet with in hunting, racing, on the road, and at grass. Hunters are never free from fever after a severe run with hounds; and whether they live or die depends on the height to which such fever extends. It is this consideration which induced me to recommend alterative medicine and plenty of tepid water on the day after hunting, which I have always found most beneficial in restoring the appetite, by diminishing the increased circulation produced by severe and long continued work.

FARCY.

I have had no experience in this dreadful malady; neither do I think it is of frequent occurrence in the stables of sportsmen, or of others where common attention to cleanliness and decent grooming is observed. In its early stage a cure is found by means of the actual cautery and mercury; but, when suffered to get well into the system, Death is the best doctor. Mr. W. Percivall thus describes it:---"It may be defined to be an inflammation and suppuration of the superficial order of the absorbents; it does not affect the deep-seated order---they do not appear susceptible of the irritation. This fact is not more extraordinary than many analogous ones to be found in human medicine. Such is the case in respect to itch, smallpox, measles, gout, &c. Itch does not disease the stomach or bowels; gout is not a cutaneous malady: certain parts are liable to certain diseases; and the skin of the horse, as well as that of man, has its peculiar affections, amongst which we may rank mange, grease, various eruptions, and *farcy*."

"Although a contagious disease, in order to communicate farcy it is necessary," adds Mr. P., "that the matter from the nose should come into actual contact with some bare or abraded part of the skin; and this, when we come to consider how uniformly the skin is covered with hair, and the mode in which we confine and stall our horses in this country, is next to impossible in the stable, and is very far from being likely to happen at grass. With respect, then, to one farcied horse communicating the disease to another, we may be very positive

in refusing credence to this. In fine, where there is one case of farcy that can be satisfactorily traced to contagion, Professor Coleman reckons there are a thousand in which its origin is spontaneous, or in which it is a concomitant of glanders."

I have said thus much, because this disease is vulgarly termed dangerously catching, which certainly is not the case. It often ends in glanders.

FIRING.

I have fired very few horses in my time, certainly not a dozen; but from the experience I have had of the mercurial plaster, I should fire still less if my years could come over again. My opinion of firing has often been asked; and my answer has always been, that if adopted from real necessity, and not from caprice, it is the best accessary to other means of cure for cases of severe injury to sinews, as well as for all bony excrescences. The actual cautery, when applied to the leg, appears to me to act thus:—On the fire reaching the membrane or sheath of the tendon, some of its glands are destroyed, and by the tendon becoming more rigid a bandage is formed*. A great authority lays it down that firing benefits the hunter, but spoils the race horse. This, however, is not always the case, although much too near the truth to be pleasing to

* If the fire reach no farther than the skin, says Osmer, little advantage can accrue to the tendon; but the fibres of the skin will become contracted and less pliant, and thus a bandage is formed. If the tendon be burnt, the consequence will be still worse; and in either case the velocity of motion will be impeded.

such as are called upon to adopt the practice in their racing stables. To go only a few years back, Crouch, the trainer, told me he considered Claude Lorraine, by Rubens, quite as speedy a racer after he was fired, for a very bad leg, as he was before; and his winning the Great Gloucestershire Stakes at Cheltenham in 1825 seemed to confirm his assertion. This, however, may be considered an exception to the general rule.

The grand mistake commonly made in firing is, having recourse to the operation before the parts are ready for it. Every atom of inflammation should be got rid of by repellant lotions and repeated doses of physic; and if the horse is quite sound and fit for work *before* he is fired, he has a much better chance of remaining so afterward. I am a great advocate for the out-door system after firing. Had I a valuable hunter that required the irons for an injured sinew, I would fill his belly every day during the cold months with good hay, old oats, and beans, and expose him to the winter's blast, housing him only at night.

GLANDERS.

Thank Heaven, I have had no experience of glanders at my own cost, although I have witnessed much of its ravages in other people's stables! Mr. White thinks the chances of finding out a remedy are not yet out, and I wish his words may prove true; whilst Mr. Sewell, of the Veterinary College, gave us to understand he had found it, which words certainly did not prove true. A friend of

mine gave him a fair trial. He purchased two young and otherwise healthy horses, which were infected with this disease, and placed them under Mr. Sewell's care, but a bullet closed the scene. It must surely appear extraordinary to some of the Old School, that neither Doctor Green nor the dews of Heaven have any chance of contending with this dire disease; but, perhaps, they account for it in this way:—I believe the horse, in a state of nature, is not often subject to glanders; as he has, however, been so long domesticated, it rather astonishes us that the remedy should still remain unknown.

Although glanders is supposed to be a contagious disease, Professor Coleman is of opinion that not one horse in ten thousand so receives the malady. I have always been of this opinion, and was the means of administering comfort to a friend of mine in Surrey, three years ago, who wrote to me in a great fright, informing me he had a glandered horse in his stud, and that his hunters *must catch it*, as they stood in the same stable with him, and, moreover, had eaten of a bran mash which he had partaken of, it having been removed from his manger to theirs! I answered his letter by assuring him there was no danger unless the poisonous matter had been applied to any place where the skin was broken, which was not likely to be the case. That glanders is communicable by inoculation, and engendered in impure air, is a fact, I believe, that no one doubts; and it is also produced generally, I believe, from sudden exposure to the vicissitudes of heat and cold, and cold and

heat; but I believe it not to be infectious except under peculiar circumstances, and in its very worst stage.

Professor Coleman has witnessed several cases of recovery from chronic glanders, where the disease has run itself out, which no doubt was the case with that fine chesnut hunter which Mr. Harben rides in the New Forest---the only instance I know of complete recovery from this fatal disorder. I really believe it to be incurable by art.

I should imagine there are few persons, having kept numerous horses of various kinds for several years of their lives, who have not now and then imagined they have had a glandered one. It was my own case a short time since, but the alarm proved to be a false one. As I think Mr. White properly distinguishes the symptoms of those diseases which may be taken for glanders, I shall take the liberty of quoting him here.---"In catarrh there is often a discharge from both nostrils; but it is attended with cough, dulness of the eyes, and general indisposition, which is not the case in glanders. In strangles there is frequently a discharge from the nostrils, and a swelling under the jaw. Here also the discharge proceeds from both nostrils: the matter is generally of a whitish colour, like the matter of an abscess. The swelling under the jaw is more diffused than in glanders; it is also tender, becomes gradually larger, and at length suppurates and bursts. Strangles are also attended with general indisposition, dulness of eyes, and cough, and not unfre-

quently, before the swelling suppurates, there is a considerable difficulty in swallowing."

Were it necessary to shew how very intimately connected are the treatment of horses in health and the preservation of them from disease, we have only to peruse a work upon glanders, published by the late Veterinary Surgeon of the Second Dragoon Guards, in which he clearly proves that in the army glanders is the almost inevitable consequence of the local situations in which cavalry is too often placed when on actual service or on shipboard; and even in quarters *where the discipline of a regiment is at variance with the well-doing of the horses.*

The following curious experiment in glanders was performed by Mr. Coleman, and is introduced by Mr. Percivall to prove the contagious as well as constitutional nature of the disease; and also to disprove the assumption of Mr. Hunter, that the blood of glandered horses does not become diseased. An ass was bled till he fell from exhaustion. The blood of a glandered horse was conducted into his empty veins until he shewed every sign of perfect resuscitation. The consequence was, the ass became violently glandered in the space of five days!

GREASE.

Thanks to a better system of treating horses of all descriptions, this filthy disease has nearly taken its departure from all but the very worst regulated stables. I never had it in mine to any degree until the winter of 1827-8, when a mare that had been

running in the "Nimrod Southampton" coach, and whose constitution had been much excited by high keep for several previous years, was severely affected with it in both her hind heels. I attributed it to her coming from as much corn as she could eat to none or next to none, producing a morbid state of the blood, with a languid circulation in the extremities, which in consequence became a prey to the disease. She was as bad as she could be in what may be termed the first stage of the disorder. In short she could scarcely limp out of the stable, and her heels were offensive to the last degree. Caring but little whether she lived or died, as she would not breed, I thought her a fair subject for practice, and treated her thus:—I had her heels washed every other night with warm water and soap, and then lapped up in a simple bran poultice; persevered in giving her three parts diuretic and one part cordial balls, as often as her constitution would endure them, and a good allowance of oats and beans. She is now (July 1828) as free from the disease as she was on the day she was foaled. I am, however, quite convinced there is more than one stage of grease in which all attempts at cure are fruitless. Mr. Percivall details the successful issue of his father's treatment of a most inveterate case of two years' standing, but the patient was subject to a very painful operation. Grease has been called the chilblain of the horse, but in my opinion improperly. Good grooming will prevent grease, but no care can exempt young children

from chilblains. It is asserted that thorough-bred horses never have grease.

HUMOURS.

Theory on this subject has undergone a great change within the last twenty years. True it is that horses which live well, and are not properly treated, are liable to a morbid and vitiated state of the blood, the virulence of which (the grease for instance) is sufficiently proved by the difficulty with which it is got rid of, and the animal restored to its natural and healthy state. The characteristic strength and vigour of the horse, however, is amply displayed by the immense and long-continued local discharge which he will sometimes undergo, without the constitution appearing to be much affected by it.

From what are termed humours, or more properly speaking foulness of habit, I have suffered very little, and lay my good luck to the account of the druggist and the balling-iron, and to an impressive lesson or two in early life.

It is well known that a very considerable number of hunters have passed through my hands, and of course some of them horses of high character, by the prices I obtained for them. In short, at one time of my life, my friends used to tell me, that, from the frequent purchases I made, there was but a shade between me and the licensed horse-dealer. It might have been so; but we will let that pass; and I will proceed to state one fact, which I think I may say is nearly, if not quite,

unequalled in the annals of horse-dealing---I NEVER HAD A HORSE RETURNED TO ME AS UNSOUND; and, as I assert this in the face of the world it is fair to assume that my assertion is correct. Perhaps it may be asked what has this to do with the present subject---that of humours? My answer is, I kept my horses clean in their habits, and, barring accidents, consequently sound.

On the subject of what grooms term *humours*, Osmer writes thus: "There is a lameness proceeding from humours; that is to say, the blood and juices are viscid, not passing readily through the various canals of circulation. Obstructions arise, by which the soft parts are affected with pain, and lameness ensues, sometimes in one part, sometimes in another."

INFLAMMATION, GENERAL AND LOCAL.

I now come to the second deep curse on good horse-flesh, inseparable perhaps from the treatment it receives in subjection to the use of us lords of the creation, but from which even a life of nature is not always free. High keep, however, assisted by bad grooming and badly-ventilated stables, is the great abettor of that inflammatory action which so often presents itself in such appalling forms, and frequently without any apparent cause. The horse, however, is certainly prone to inflammatory complaints.

All things considered, I have escaped pretty well in my own stable from the effects of inflammatory attacks, whether general or local, and can

only number six cases beside the two I have mentioned. The first, a five-year-old horse, died from an attack of inflamed lungs, occasioned by a chill with hounds. The second, seized with general inflammation, had a very narrow escape, but recovered by the attention of Mr. Wild, V. S. of Oxford, and I sold him for two hundred guineas. He was in no wise far the worse for it, which I take to be an unusual case. The third was seized with general inflammation, owing to being over-worked with hounds. His life was saved by the skill of Mr. Lucas of Atherstone; but his feet came off, and he was worth nothing afterwards as a hunter. The fourth, an alarming attack of general inflammation, occasioned by neglect of a helper who had the care of him in the absence of myself and my groom. His life was saved by the judicious treatment of the late Mr. Palfrey of Worcester, and I sold him for two hundred guineas. He was, however, always queer in his feet, from the effects of his illness, though he hunted six seasons. The fifth, a case of general inflammation, was in imminent danger for many days; but being a stallion recovered rapidly, and I sold him *the same season for one hundred and fifty pounds.* The sixth, a desperate case of inflamed lungs. After extreme suffering for eight days (during which time and for seven succeeding days he never laid down, and his life was despaired of), he was saved by the skill of Mr. Fryer, near Northallerton, in Yorkshire. This horse recovered, all but a slight cough on first coming out of the stable on a cold morning, and

I sold him at the latter end of the year 1827 for one hundred guineas, *subject to this cough.*

I must offer a remark here: with the exception of one, each of these cases occurred when I was absent from my horses. The reader may fairly ask, then, do I mean to imply by this, that, *had I been with them, they would not have been so attacked?* I do not go this length; but thus far will I go---namely, that barring epizootic affections, so prevalent at particular seasons of the year, it is in the power of a good groom---I mean a man of understanding, who looks to the state of the bowels, and to symptoms which he is equal to comprehend and to take for his guide---to secure his stable against these internal complaints, unless produced by unmerciful riding after hounds, or on the road. Of course I must also bar chills caught by neglect of inferior servants; but these seldom occur in regular hunting establishments. In the case of the stallion, however, I did not act with my usual vigilance. The horse was brought to covert for me, and I mounted him; but perceiving him dull, and unmindful of passing objects, *and also touching little obstacles with his toe*, so contrary to his natural action, I sent him home directly, ordering him to be copiously bled, and his corn diminished, *but I did not sufficiently raise the warning voice.* Having another horse in the field, I pursued the chase; and when I saw my sick horse, *the next day but one*, it required all the skill of a very eminent practitioner to preserve his nearly forfeited life. Had I ordered the veterinary surgeon

to be sent for the moment my servant got home, I should have acted a much wiser part.

I am of opinion that horses having become subject to severe inflammatory attacks, scarcely ever are themselves again; and I will never in future purchase one which I know to have been so afflicted. The only hunter I ever had go blind in my possession was at death's door with general inflammation *before I was possessed of him;* and to that, I dare say, might his blindness be chiefly attributed. Previously to his illness I offered a hundred guineas for him, and purchased him afterwards for fifty pounds; so that his owner must have been somewhat of my way of thinking.

It is not for me to enter physiologically into this dangerous complaint, which I think is well described by Mr. White. "Inflammation," says he, "consists in an increased action of the heart and arteries, when *general;* whereby the blood circulates with unusual velocity, throwing the whole system into derangement: and when *local*, the increased action is in like manner confined to the vessels of that part." That which is general, he tells us, "is often produced by plethora, and is only an effort of Nature to get rid of so much superfluous blood; and when local, that superfluous blood is determined to some particular part, frequently falling upon some of the internal organs, such as lungs, eyes, bowels, &c." Bracy Clark also confirms this: but, in my opinion, with hunters, chills, by a sudden constriction of the capillary vessels; being ridden with hounds when not

properly prepared for severe work; want of attention to the state of the bowels; and, above all, sudden changes of system, are the general predisposing causes of all inflammatory attacks of the nature I have been describing.

Mr. Bracy Clark observes, "A much greater number of horses that are high fed, and stand much at rest in close warm stables, die of diseases which are brought on them from the want of regular exercise, especially in great towns, than from any other class of diseases to which they are liable." In this I coincide, and it is in support of my argument that *good grooming* is a preventive of them; but are we to conclude from this, that high keep, want of exercise, and hot stables, alone produce these diseases? Certainly not; although it is too much the fashion with veterinary surgeons to lay them to such causes. Mr. W. Percivall, indeed, tells us (Lecture 77) the horse is an animal destined by Nature to breathe an atmosphere of the purest kind; in proof of the salubrity of which to him, suffer him to remain in his native fields, and he will live long and ail nothing." Although sorry to differ from such high authority as this, I cannot here give my assent. Acute diseases are not only not confined to a life of art, but when they make their attack on a life of nature the resistance is extremely weak. In the summer of 1828 a veterinary surgeon in Oxfordshire witnessed the death of four colts out of six from internal inflammation, *although they never had been in a stable since they were foaled!!* I say "witnessed," because I find he was not called in to them until the disease had

made some progress, and then, in their comparatively defenceless state, his assistance was of no avail. But I need not go into Oxfordshire for evidence in this case. I need only refer to my own establishment. Since I have resided here, now (*i. e.* 1828) six years, my average stock has been about twenty-five head of horned cattle, and sixteen or seventeen horses; the former living as nearly as possible what may be termed a life of nature, the latter *always housed*. Of the former, I have lost half a dozen by disease; of the latter, not one. For once that my horses have required the aid of medicine for disease, it has been administered ten times to my cattle. So much for the *natural* frailty of animal life!

Mr. White, whose authority I respect because he deals in reason, and is, I think, generally near his mark, tells us that almost all the diseases of horses may be attributed to improper treatment, either in regard to feeding, exercise, state of the stable, or shoeing; and I am quite certain that, barring epizootics, most inflammatory attacks are to be thus accounted for. It is quite rational to conclude, that, if the *ingesta* exceed the *egesta*, derangement must ensue. It is, however, astonishing how little people in general regard the state of their horses' bowels, although they are every day reminded of the necessity of attention to their own.

I will produce one fact here in support of my argument, although it is to be hoped that there are but few instances of such treatment, or, I should rather have said, neglect. A neighbour of mine had a horse which he used as a stud horse, and last

year (1827) he was seized with inflammation of the bowels, and died. On opening him it was found he had laboured under a most powerful constipation of the bowels, which nothing, after a certain period, could remove. "How long was it since he had physic?" said I to his owner, when condoling with him on the loss he had sustained. "He *never* had any," was the reply; and, on inquiry, I found he had had him in his possession more than five years. Now horses of this description are of all others the most in need of temporary evacuants, from the state they are kept in, sometimes living high, and at others low, and for the most part debarred their regular exercise.

When the internal organs are disordered, cure must depend on knowledge of the structure of the parts where disease is situated. We require not only a practical knowledge of the living subject, but also the testimony of the dead one; and such being the case I shall bring this subject to a close. When I say that the most active measures, directed by the best veterinary skill, are every day unable to check the determined violence of acute, or indeed of chronic, inflammation, it would ill become me to say one word bearing any relation to the medical treatment to be pursued, beyond the scarcely necessary hint, that, if advice be not immediately to be had, *copious bleeding may be safely practised;* but it would be better to leave the bowels alone until the nature of the inflammation be ascertained, as in some cases violent purging is destructive. Rowels also are of little service in

the acute stage of inflammation, and blistering had better await the veterinary surgeon's arrival.

Animal economy is so strongly affected by all alterations of food and atmosphere, we cannot be surprised that to sudden changes of condition may be referred the exciting causes of many of these inflammatory attacks; and I believe this is theory which no one disputes. We may then safely infer that a well-ventilated stable with good grooming, food proportional to exercise, attention to the bowels, and as little exposure to extremes of all kinds as can, under all circumstances, be avoided, is the best security against the dangerous and so often unlooked-for diseases of which I have been now speaking. Thus, Mr. Percivall tells us (Lecture 38), when pointing out the causes of diseased lungs:—"If cold produced it, pneumonia ought to be more prevalent at this time: so also, by parity of reasoning, we may argue that it is not heat; for many horses in hot climates are exposed to a higher degree of heat in their natural than in their domestic state. *Alternations of these conditions*, however, appear to be powerfully influential in the production of this disease—a fact which the knowledge of the physiology of the lungs may lead us to understand; since no part of the animal is so much under the operation of changes of temperature as the mucous membrane lining the nose, windpipe, and air cells, with which cold or heated air must actually come in contact at every inspiration, in a manner I have before pointed out. If we couple this physiological truth, then, with the exciting causes of inflammation in general, need we feel

surprised when we find that this membrane, of all other parts, suffers from the operation of such agents?" Now the volume of this work, from which I have extracted the foregoing, was not published when I urged my arguments against the danger of exposing horses, which have been kept in warm stables for nine months of the year, to the cold and frosty nights of May and June, and thus accounted for so many of them becoming roarers.

Again---"With respect to *change of food*," says Mr. P., "there cannot be a doubt but it must dispose, from its being the chief cause of plethora, to general diathesis of the system; and so far it contributes to the production of pneumonia, or any other inflammatory affection."

I shall now conclude this subject with observing that Mr. Percivall devotes upwards of seventy closely printed pages to these inflammatory complaints, which he expatiates on with his usual ability. The reader will not expect me to follow him into his treatment of them: but let those who have studs keep a sharp look-out, for inflammatory complaints are never far from their stable doors. If a horse appears dull; looking heavy in his eye; drooping his head; becomes restless, frequently shifting his legs; let his owner not wait for the short cough and dilated nostril (which most likely his groom would do), but let him send express for the best advice he can procure!

FOOT LAMENESS.

A spirit of inquiry has lately pervaded all ranks of the people, and I have not altogether remained

passive: on the contrary, on this particular subject ---one of such vital importance to an animal to which I am so ardently attached---I have travelled many hundred miles, and spent many pounds, in seeking for instruction and knowledge.

On all subjects connected with science I have ever been partial to the interlocutory style. We have not only some of the brightest ornaments of antiquity for our model---the Bible itself not forming an exception---but another advantage appears to accompany it. We often glean information from the questions, as well as from the answers given to them; and it enables the writer more minutely to divide his subjects. I shall, therefore, assume the signature *B*, and reply to the questions of my brother dialogist *A*.

A. You say you are about to write on the complicated diseases of horses' feet, and on shoeing! Have you the vanity to imagine you can offer anything new and satisfactory on a subject upon which one would suppose inspiration itself could scarcely throw any new light?

B. Why should I be deprived of vanity, that choicest given of Heaven? We are all subject to speculative errors, and doubtless I am not without my share: but here I shall speak the powerful and practical language of experience, and facts shall be the basis of my reasoning. Now then to business.

A. Do you attribute the frequent instances of horses being lame in their feet to the evils of bad shoeing?

B. Certainly not---inasmuch as the form of the shoe is concerned. Provided no injury be done by

driving the nails improperly, I will answer for it no horse ever was or ever will be lamed from merely wearing an ill-constructed shoe. I would pledge my very existence, that, out of fifty horses shod by the most inexperienced apprentices that ever practised the art, not one of them shall be lame from this cause alone.

A. I imagine you do not mean to assert that bad shoeing will not alter the natural form of the foot?

B. Bad shoeing will alter the natural form of the foot; but not once in a hundred times will it of itself produce lameness---not even from corns.

A. To what then do you attribute the very frequent occurrence of foot-lameness?

B. Principally to these causes:---Natural malconformation, or rather weak organisation of the internal parts of the hoof; inflammation, and fever produced by excitement of high food and hard riding or driving; concussion from beating the ground on the road and at grass; irregular and unprepared-for work; improper position of the limb, occasioning an uneven tread; and, above all, *the pace*. "It is the pace that kills."

A. Do you mean to say contraction will not be produced by bad shoeing, and that contraction will not produce lameness?

B. Bad shoeing, as I have said before, may alter the form of the foot; but I have yet to see an instance of contraction alone producing lameness in the foot of a horse. On the contrary, my experience has justified the conclusion that the narrow mule-like foot is the foot most likely to stand, uninjured, very severe work on the road. Asses, mules,

and ponies bear me out here; for they are never lame in their feet, though they are contraction exemplified. I am convinced that contraction of the hoof, when not natural, is the *effect* of internal inflammation of it; but I have never seen a solitary instance of its being the *cause* of lameness. This, it will be remembered, is not the first time I have broached this opinion. It will be recollected I stated in illustration of it, my having purchased a hunter in Gloucestershire for 150*l.* (*p.* 140), which, although a known good one, no man in Colonel Berkeley or Mr. Hornyold's Hunts would buy because he had very narrow feet, and consequently *must be lame*. Now this horse was sold, by Messrs. Tattersall, for eighty guineas, as sound on his feet as when he was foaled, after six more seasons' hunting, carrying a very heavy weight.

A. Do you mean to say you prefer a narrow to a wide foot?

B. By no means. I very much prefer a wide foot for a hunter, for reasons which I need not state; and on the road, a horse having a firmer basis to support his body, treads more securely on a wide foot than on a narrow one; but very few wide feet, which have generally thin soles, if not low heels, will stand severe battering on the road.

A. Do you mean us to understand that it matters not whether a horse be ill or well shod?

B. I do not go so far as this; but I am quite convinced that the art of the mechanic, however skilfully employed, is only an auxiliary to the soundness of horses' feet. To shew you, however,

how important I consider good shoeing to be, I hazard the presumption that it even preserves the form and shape of the *natural* foot. I mean to imply this: You shall keep your horse five years without shoes, and doing nothing but running wild in his pasture: I will keep my horse shod, doing work, and in the stable: and at the end of the five years---provided no internal disease, proceeding from causes which I have before enumerated, has attacked them---the feet of my horse shall be not only as sound as those of yours, but in a firmer and better form for any kind of hard work; and I see no reason why it should not be so. Nature is liberal to those who cultivate her, and has no objection to our following and embellishing her; but it is by violating, forcing, and counteracting her that the mischief here is done.

A. Then you mean at once to assert that shoeing is not a general cause of foot-lameness?

B. General conclusions cannot be drawn from individual cases; but, speaking generally, I do not think it is. When executed on its worst plan it has not alone the power to produce lameness; but when in conformity to the principles of Nature, it is a protection and a preventive of disease. Pardon here the following short digression.

When time was young, and earth in a state of nature, horses might not require shoes; but that they should so long have been without them as a defence to the foot, I have always considered a serious reflection on the inventive genius of mankind. Let us look, however, to the result. The most serious inconveniences, attended with great

loss of human life, were the consequences of horses not being shod. Armies were rendered useless—(Hannibal's, for instance, when opposed to Scipio, whose horses were unfit for service by the bad roads they had marched over; those of Mithridates in Bithynia, and a score other instances)---and, in short, the value of the animal was comparatively small. To this, indeed, we may ascribe the preference given to asses over horses in the earlier stages of society for all domestic purposes; for, notwithstanding the pains they took in selecting those with strong hoofs that "shall be counted like flint," and loud sounding hoofs ---which, by the bye, must have been narrow and hollow ones---and old Xenophon's recipe* for hardening them, they were but of little service to them.

A. Now then explain to me what you consider good shoeing; and tell me whether there is any general principle to be acted upon, either in preparing the hoof or in the form of the shoe.

B. That there is no general system to be pursued in shoeing, is best proved by the well-known fact, that all system-mongers and their systems have gone to pot together, and we now hear no more of them.

A. Of course, then, you will shew us in what way different kinds of horses are to be shod, so as to prevent as much as possible the probability of their feet receiving injury from shoes; and also inform us how they should be treated generally, so

* Vegetius mentions a salve—"quo ungulæ nutriantur, et medicaminis beneficio subsecrescat quod itineris *attriverat* injuria."

as to ward off the other evils of which you have spoken.

B. You have allotted me a task which no man yet born can perform. It is in no man's power to alter the natural mal-organisation of animal structure. If the hoofs of a horse are defective---which many are from the time of birth---and his tread is uneven, nothing will prevent his being lame if exposed to high keep and fast work---the former, however, not being always essential.

A. When you speak of horses' hoofs being defective from birth, do you mean in external form---such as too thick or too thin in the sole; too high or too low, too wide or too narrow, in the heels?

B. I except all shapes and forms. My experience---and I have paid for it---instructs me, that such feet as you would take for models are often defective from birth. Disease often attacks them previously to their being exposed to injury; but should it so happen that feet of this description are attached to *legs improperly placed*, it is next to a miracle if they will endure hardship.

A. Will not good shoeing remedy this defect, and render a horse sound at six years old, which may have been struck with foot lameness at four?

B. It might do so by producing a more even tread; and after the wonderful changes I have seen effected by shoeing in the horses at Carlton Palace, under the direction of Mr. Goodwin, which he has so ably demonstrated by casts, I will not say it is not so; although Mr. Goodwin told me that in one instance---a three-year-old colt, purchased for

His Majesty, which was struck with foot-lameness at grass when a three-year-old, and continued lame for eleven years---no relief could be obtained. I have a case now (July 1828) in my own stable which applies well here. It is of a four-year-old mare which I bred myself, and had not been shod more than six times, and then by an excellent hand. I was riding her on the road at the rate of ten miles an hour, when all of a sudden she dropped very lame in the near fore-foot. With difficulty I got her to Reading, and left her at the Crown Inn for the night. The next day she walked home, and the usual means were resorted to in order to cool her foot---for it was evident the injury was there---and she soon became sound. *This mare, however, will be a cripple for the rest of her life ;* and all the art of a Goodwin, a Turner, or the Professor himself, will never keep her sound if put to severe work. She now goes sound after she gets a mile from her stable ; but the navicular bone is injured, and no human art can restore her. At the same time I must observe, that if I wanted a model of a finely-formed foot I would take it from the one I have been speaking of ; for it is perfect as far as outward appearance goes. But here is " the young disease, that must subdue at length."

A. I cannot help thinking you will lose all your credit with the public for having said that bad shoeing will not lame horses.

B. The experience of my life has confirmed the truth of my assertion; and, if I liked it, I need

not go from my own cart-horse stables for the proof of it. But I will go farther a-field. I will go to the two Principalities of Wales, into the very remote parts of them, where shoeing is performed in the most clumsy manner. There, excepting among those used in coaches and post-chaises, you never see a lame horse. Now the question is---why do you not? I answer, because you never see a horse going more than five miles an hour, and corn is very sparingly given. I have sojourned a great deal in those parts, and never did I see a thorough-bred Welchman, drunk or sober, ride beyond that pace. I say again---"*it is the pace*"---the *telling pace*, the high condition we so much boast of, and not the iron defence of a shoe, that lames *one half* of our horses. Take off their shoes, and *all* of them would be lame. I mean, then, here clearly and distinctly to give it as my opinion, that if horses were never to be ridden more than five miles in the hour, and fed very sparingly with corn, they would never be lame in their feet, whether shod ill or shod well, unless in cases of constitutional disease---as was the case of the three-year-old of His Majesty's just mentioned, who was struck with foot-lameness before he was put to work, or shod.

A. Will you tell me what you consider good, and what you consider bad shoeing? And will you afterwards state the most likely course to pursue to keep horses sound in their feet from causes unconnected with shoeing?

B. I will do so at a future opportunity.

A. Will you tell me what you consider a perfect foot?

B. It is obvious that a perfect foot is one that is formed agreeably to the best pattern that Nature presents to us; and when we consider that the contents of it are highly sensible, being composed of bones, tendons, ligaments, nerves, arteries, and veins, we must look upon it as one of the finest specimens of the plastic art. I do not, however, require what is called a perfect foot---perfect I mean to the eye---for I have seen many such not worth sixpence each. I require one (no matter in what form, although I should prefer a wide one for a hunter, and a tolerably wide enough one for a hack) which is made of firm materials, and able to resist disease. This, however, can only be proved by experience. For instance, I thought I had a pair of beautifully-formed feet under the four-year-old filly I bred, and so I have; but I would not give sixpence a dozen for such for my pace on the road. I do not believe the tread has anything to do with this case, as the structure of my mare's shoulders and fore-legs is very true, and her knees and pasterns excellent.

A. If you had a horse with an ill-shaped foot, apparently inclined to contraction, would you take any steps towards bringing it to a better form?

B. Certainly not. If the horse be sound, let well alone; for, as Mr. Goodwin observes, "were all horses whose hoofs are deformed to be under treatment, three-fourths of those in the United Kingdom would be put out of work." I have seen

a great deal of injury done by blacksmiths opening the heels of horses with their drawing-knife, and putting on shoes too wide for the foot. This practice gets them many a half-crown, and ruins thousands of horses. A gentleman sends a horse to their shop, and the following is generally the *blarney* on this occasion:—"If you had not sent this horse here, Sir, you would soon have had him lame: only see how his heels are grown together!" The operator now sets to work, unmercifully, with his butteris or drawing-knife, and when he has cut a great cleft on each side of the frog—to the evident weakening of the heels which support the greater part of the animal's weight—and placed a shoe nearly straight at the quarters, too wide for the foot and heels, and consequently giving it the appearance of being open, he exclaims, "there, Sir, *now* you have a fine open foot." I have said before, I do not *insist* upon an open foot, for I have seen as many horses lame with them as I have with strong and narrow heels, and such as incline inward; at the same time I should much prefer an open foot, if it be firm a one, for very obvious reasons.

A. Then you mean to say, the art of the mechanic is only an auxiliary to the sound state of a horse's foot; and that, whether he be shod ill, or whether he be shod well, he will always be liable to be lame from causes totally unconnected with shoeing?

B. That is decidedly my opinion; and I take my stand on the hind foot, *which is never the seat of founder*, although composed of precisely the same materials as the fore-foot, and not only subject to

all the inconvenience of nailing the shoe on it, but to a considerable share of neglect into the bargain; for we are well aware grooms of an inferior order never pay much attention to the hinder feet. I must, however, go farther here:—the hind *leg* is subject to more diseases than the fore leg; but how happens it that the *foot* is not? Again, how happens it that I may over-mark or distress my horse in a run, and in a few hours a violent fever shall attack his fore-feet, whilst his hinder ones remain as they were? I am now alluding to a case where there shall have been no beating the hard road; no concussion (for my horse shall have been going over his fetlocks in dirt, and only for half an hour); no mal-structure of his limbs, for he shall be a well formed one; and, if you like it better, he shall have been ridden barefoot.

Now what is the consequence of this half hour's burst? Why, that my horse shall be lame in his fore-feet, from this time forth evermore, but that his hinder feet shall feel no injury whatever! What then am I to conclude from this? *Why, I naturally conclude that there is a predisposition to disease in the fore-feet of horses, which not only does not exist in the hinder ones, but with which shoeing has nothing to do.*

A. Your argument is forcible, but you have been alluding to hunters, and not to road-horses, and it is to the latter that the system of founder chiefly applies.

B. I admit of but very little distinction here. It signifies not much whether I ride a horse very hard over a country, or whether I rattle him fifty

miles on the road. In either case *fever will be produced by the excitement, and that fever has undoubtedly a determination to the sensible parts of the fore-feet.*---I consider the following statement highly confirmatory of the opinion I have ventured to give :---"When a horse," says Mr. Goodwin, "has been lame for some time, without any apparent cause, this disease (founder) is then generally supposed to exist. It prevails among all sorts of horses, but *never occurs in the hind feet.* I cannot give a better illustration of it than by relating the following case, which occurred in a celebrated hunter. When I saw the horse, he had then been lame two or three years, and it had been supposed that he was merely tender or sore from some slight cause; but in spite of all the remedies that were adopted, the disease increased progressively until he became excessively lame, exhibiting all the distressing symptoms observed in severe cases of contraction. Various opinions have been formed as to the seat of the disease; as almost every part of the fore-legs, shoulders, and feet, bore the marks of a variety of operations which had been performed---blistering, firing, rowelling, &c. After having minutely examined into the nature of the case, my opinion led me to state that there was no prospect of relief, and that, notwithstanding *the hoofs had every appearance of perfection*, the cause of lameness would be discovered on dissection to exist in the foot.

"The gentleman to whom the horse belonged immediately directed that he might be destroyed,

and after death sent me the feet for dissection. There was no reason whatever to believe that any change of the form or structure of the horn was the cause of the lameness; but on prosecuting the dissection, I found that a considerable degree of ossification had taken place in the large flexor tendon, which passes over the navicular bone; adhesions also between the bone and the tendon; the articular cartilages were denuded, and the body of the bone had become carious. The disease in both feet was nearly similar.---The symptoms and appearances," adds Mr. G. "in all cases of this kind of lameness are much the same!"

Now, may I ask, where is the man who will say *No* to these three questions:---Was not this disease totally unconnected with the external structure of the foot? Was it not produced by inflammation? And might it not have happened if the horse in question had gone barefoot all his life?---Surely no one will pretend to say that concussion does not take place with or without shoes; and which Nature must have been aware of when she provided so carefully against it.

A. But is it not generally supposed that concussion, increased by the resistance of an iron shoe, is the general cause of foot lameness?

B. I should soon bewilder you and myself were I to enter fully into this subject. One reason Mr. Coleman gives for the large dray horses *never being lame in their feet* is, the immense weight which at every step is imposed on them; whilst others say that nothing but concussion produces the

mischief. Mr. Bracy Clarke has told us, that so long as we have an inflexible, unyielding substance affixed to a flexible elastic foot, so long shall we have lame horses; and Mr. Bracy Clarke does not stand alone here.

A. Why then has not the ingenuity of man found out a remedy for the evil, by inventing elastic shoes giving way to the extension of the foot?

B. What! have you never heard of the various patent expansion shoes of Mr. Bracy Clarke and others?

A. What is become of them?

B. Did I not tell you that the systems and system-mongers were all gone to pot together? Expansion shoes have been tried, and not found to answer; therefore it is fair to conclude that mere concussion is not the root of the evil. *The root of the evil is the pace; and inflammation is produced by the consequence of that pace, unaccompanied by good grooming to counteract it.* If concussion alone were the cause, surely the ingenuity of the whole body of veterinary surgeons would have found some certain and feasible method of providing against it; but it all ends in this:---*With shoes*, at the pace we ride our horses, and from our high keep, we shall always have one-fifth of them more or less injured in their feet: *without shoes, all would be lame:* so of two evils we should chuse the lesser.

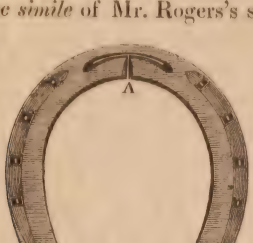
Never having tried them, I can give no opinion of the effect of what are called expansion shoes---

but in reading on the subject, I have found such stuff as this:---That when a smith is nailing a shoe of the common make on the foot of a horse, the foot, when held up by the said smith, is in its most collapsed state, and narrower in consequence of the weight being removed from it.---Now I will answer for it, that the width of ten thousand horses' feet shall be taken when standing under their weight, and not an atom of difference in the external form will be found on taking the foot up.

A. Then you are of opinion that no shoe has been as yet produced that can be said to prevent concussion, admitting that to be one exciting cause to lameness?

B. "An inquiry into the structure of the foot," says Mr. Goodwin, "will alone shew that it is impossible to suggest a form of shoe which can admit of all the functions of the foot being duly performed; and that shoe," adds he, "is the most entitled to our notice which gives the least inconvenience to the animal, and allows of the most natural position to the feet, either when in action or at rest." When in Devonshire, four years ago, I certainly saw a shoe made by Mr. Rogers, V. S. of Exeter, the most likely of any I ever met with to counteract the effects of an inflexible substance nailed to a flexible organ, on which great weight is to be placed; and, as far as concussion can be allowed its share in producing the diseases of feet, might certainly prove an antidote. I have shewn it to several practical men, who admired

it much, provided it could be brought into general use---the only sure test of its merit. The annexed figure is a *fac simile* of Mr. Rogers's shoe :—



I have given this drawing of it, as it is not in my power to describe the name of the joint, if such it can be called, which enables the shoe to expand with very little force of the hands applied to the heels of it. On taking one heel in one hand and the other in the other hand, and holding the shoe to the light, the expansion of the nick or hinge A is very apparent to nearly the eighth of an inch. At first sight we might exclaim, surely this shoe, from being so nearly cut through at the toe, must break when exposed to much friction!---but this does not appear to be the case. Mr. Rogers shewed me one that had been carried three hundred and twenty miles on a wheel-horse in the mail, and which was no more worn than any common shoe. It must, however, be observed that these shoes are manufactured by what, in white-smithery, is termed plating, and afterward reduced to steel temper; which circumstance alone will ever pre-

clude their general use, and therefore they will experience the fate of all other systems.

I now come to another antidote for concussion, which, as it appeared easy of access, I thought I would try the effect of. I allude to a thick piece of leather, resembling that which composes the sole of a walking shoe, placed so as to cover the surface of the foot, and the shoe nailed through it. As a farther advantage to feet that had been injured, *stopping*, of a very adhesive nature, was applied to the cavity of the foot, and all, including the frog, was well secured by this leathern sole. Mr. Sewell, of Water Lane, Strand (brother I believe to Mr. S. of the College), was the operator; and having a well-bred hack in London, with rather mule-like feet, and a little the worse for the many thousand miles she had galloped on the road with me in the two preceding years, I thought her a fit subject for experiment; so took her myself to the forge, and witnessed the whole process---paying seven shillings for the operation on the two fore feet.

Now then for the result. I got on her back in Piccadilly, intending to ride her home (fifty miles) to dinner on a short winter's day, therefore the pace was quick. The roads also were extremely wet; and as I was walking her up Egham Hill, only nineteen miles from town, I took the opportunity of looking at her feet, when I found one of the leathern soles was entirely destroyed by the friction of the gravel, at the pace I had ridden; but the other was firm in its place. Conceiving, from the mule-like form of this mare's feet, that they were

best adapted for this contrivance, and finding it unequal to the purpose I had applied it---namely, twelve miles an hour, on a wet gravelly road, and also finding no difference in the gait of my mare---I never again rode in leathern shoes, but placed them to the account of the systems.

There are, however, advocates for anything that is new, or a little out of the common way. A neighbour of mine who hunts on the Hampshire Hills, and is a little particular about his horses, has them shod over a leathern sole, and tells me he finds it answer. My opinion on this subject is, that if his horses have bad thrushes, the leathern covering may be useful; but, as far as my experience of horses going over flints in the winter has led me, I consider them beneficial, and not injurious to their feet.

Mr. Rogers, of Exeter, sent me another kind of shoe, intended to ward off concussion. This has a spring on the near heel. The shoe was accompanied by a certificate from the horse-keeper, of its having travelled some hundred miles on the foot of a mail coach horse, and the spring was *in statu quo;* but I conceive it is too powerless to be of any service in arresting concussion under so weighty an animal as a coach-horse. I very well remember the noise that was made about Mr. Bracy Clarke's *jointed* shoe, which was to preserve horses' feet to the latest periods of their lives; on the principle---a just one truly---of imparting to the shoe the same degree of elasticity that the foot itself possesses. This was to have formed "the basis for the repose of the profession;" but the

dream was of short duration---the stress on the nails in the shoe was found to be injurious to the hoof. Such of my readers, however, who will be at the trouble of looking for it, will find in volume xxviii. of the *Sporting Magazine* (*p.* 210) a copy of a patent Mr. Clarke obtained for another shoe, which was to remedy every evil supposed to have its origin in shoeing. I will not attempt a description of it; but such a farrago of nonsense never before emerged from the brains of a sensible man, which Mr. C. is allowed to be; and it is the multitude of these futile productions that has brought discredit on the practice of shoeing, and induced so many to pronounce it quackery.

A. What is your opinion of the necessity of pressure on the frog? Has not Professor Coleman asserted that unless the frog receive pressure it becomes diseased?

B. Were a learned mathematician to tell a ploughman that the three angles of a triangle are equal to two right angles; or that the square of the hypotenuse of a right angled triangle is equal to the sum of the squares of the two sides; the ploughman is, I believe, bound to believe it on the skill and knowledge of his informer, because his own ideas on the subject will not enable him to dispute the fact. Not so here*. And, perhaps, had

* Had the Professor ridden as many hundreds of thousands of miles on the road as I have ridden, on all sorts of feet, he would have long since been convinced that not one horse in a thousand is safe with the frog in contact with the ground. Without weight on his back he might be so; but, when carrying his rider, he will be constantly flinching when stepping on hard surfaces, particularly broken stones.

the mathematician touched upon ploughing, the ploughman might have had the best of the argument. The theory, however, of the frog is beautiful. "No animal, nor any part of an animal," says the Professor, "can be preserved in health, where the natural functions are prevented." Again: "When the frog is not sufficiently pressed upon, it becomes soft from the accumulation of the fluid which it naturally secretes in great abundance from the fatty substance which lies immediately under the tendon." It is also part of Mr. Coleman's theory, that, without pressure on the frogs, the cartilages of the coffin bone no longer act upon the coronary ring; and that, as the horn is secreted, it takes a wrong direction in consequence of this want of action on the cartilages; and hence, he says, all the disease which takes place. "The frog," says White, "resembles a wedge; but towards the heel, where it becomes wide and expanded, there is a separation in the middle, which is continued to the heel. When the frog receives the pressure of the horse's weight, this separation is increased, and consequently becomes wider; and, as it is connected with the heels of the crust, the same effect must be produced upon them." Again: Mr. White says, more forcibly, "the sensitive frog resembles a wedge: its point is to the toe, whence it becomes gradually wider and larger; it is divided by a cleft in its centre towards the hind part, by which it is enabled to expand or become wider when exposed to pressure."

Now all this would lead us to imagine, that, if we wish to preserve the feet of our horses in a

sound state through life, we have nothing to do but to let their frogs touch the ground, and all is sure to be right. Mr. Coleman must have been of this opinion when he obtained patents for his iron frogs, and anchor shoes, and thin-heeled shoes, which, if I had Lord Plymouth's or Sir Harry Goodricke's studs, should not be used in my stable under a premium of fifty pounds per day; but he does not stop here: he adds, that where the frog does not touch the ground, *disease must be the consequence.*

Now, although the Professor, I believe, stands alone here---(for White, Goodwin, and most other writers on this subject deny the assertion)---facts, and not words, will alone satisfy me; and therefore I proceed to experience.

More than four-fifths of the horses I have had have been those whose frogs never came in contact with the ground when standing on firm ground; and yet I can reckon up but six cases of foot lameness; and those in very perfect feet to look at, with fine prominent frogs. I must, however, go farther a-field than my own stable. Let a man start at Hyde Park Corner, and go the Land's End in Cornwall, a distance of about three hundred miles; in coaching work, and in posting work, he will find at least two thousand horses. Now, I will answer for it, five hundred of those shall be perfectly sound horses, including what are called riding post-chaise horses, *which must be sound*, or they could not carry the post-boys; and yet the frogs of not more than a dozen of these shall receive pressure from the ground, during the summer months at least

which are the most trying to the feet. Out of the two thousand horses---almost always in the stable too---there will not be found a hundred with diseased frogs. I looked over a very large posting establishment on the Bath Road a short time ago to ascertain these points, and I could not find half a dozen diseased frogs; but a great many in a very perfect state, which belonged to feet many years at work, but *not coming in contact with the ground*. On my asking if it was usual to stop the feet in these stables, I was answered, only in a few particular cases.

The best proof of the folly of insisting on the necessity of the frog receiving pressure to prevent disease, is to be found in the total abandonment of Mr. Coleman's thin-heeled shoe, as it is called, after a very fair trial both in and out of the army. "Had it proved itself to be a preferable plan," says Mr. Goodwin, "it would certainly, with the trial it has had, have been adopted at this period in every forge; instead of which I believe it would be difficult to find even one in any part of the kingdom where it is generally employed *."

* I think the following extract from Mr. Goodwin settles the point of the thin-heeled shoe, and all other attempts to make the frog of a horse, which wears any shoe at all, come in contact with the ground:—"When a horse is shod with this thin-heeled shoe, the position of the leg and foot is unnatural, and continually upon the strain, when the toes are raised so much above the heels: and this must be the situation of all horses shod thus, except in those which have become mule-shaped by contraction. Therefore it is these only which will bear a diminution of horn at the toe equal to a reduction of the shoe at the heels, which Mr. Coleman urges the necessity of paying due attention to. Sprains in the tendons and ligaments, as well as fatigue in the muscles of the leg," adds Mr. G., "often occur

I believe I have before stated my conviction of the little chance such a bit of spongy substance as the elastic frog of a horse has to resist the united power of iron and horn; as well as my experience of hundreds of horses continuing sound to a good old age with scarcely any frog at all.

A. What do you call a perfect foot?

B. A sound foot.

A. Do you not insist on a circular base; wide, open heels, and prominent frogs?

B. On neither, for I have so often found them delusive. At the same time I should prefer them, being more agreeable to nature. I like a good-sized foot for all purposes, but it must not be too large in a race horse or a roadster. *I must, however, have a good pastern above it, or the best-organised feet may fail.*

A. How would you examine a horse's foot before purchase?

B. I would first stand in his front and examine the wall or crust. If I saw it indented about an inch and a half below the coronet, and a ring, or rings, running round it, I should not buy: *I should suspect previous disease.* If these symptoms were not present, I should take up the foot and examine the ground surface of it, and I should not reject a good hunter because he might have narrow

from their being thus unusually exerted." And he concludes by saying, "he has never observed that horses thus shod are less liable either to contraction or to corns. On the contrary," adds he, "I have remarked that it (the low-heeled system) is particularly injurious to weak feet, and disposes the heels to shelve forward; the foot, in consequence, loses its equilibrium, and the horse goes unsafe, and is continually tripping and blundering in his paces."

heels, thrushy frogs, or even none at all. There is, however, a foot we call "a weak foot," which I should certainly reject, however open the heels and prominent the frogs---at least, if the price were high. Independently of the appearances before spoken of, there is such a deficiency of horn in feet of this description that they never stand road-work, and shoes are never secure on them. They have seldom any heels; require great care in shoeing; and, next to the actual pumice, are the most troublesome to a groom to keep right.

These weak feet, however, it must be observed, are generally wide and open, and nearly, if not quite, circular at their base; and on this subject Mr. Goodwin may be aptly quoted:---"Much has been said by Mr. Coleman (says he) about the circular form of the hoof being an unerring principle of nature, and when so formed it is by him considered as a test of its perfection; but as the class of hoofs I have here described is numerous, and very generally circular, I contend that a circular form furnishes no proof of the perfection of the foot." It may now be asked, what is the best shoe for a healthy foot? which question I shall answer presently.

A. Having connected the proper structure of the pastern joint with a foot likely to stand sound, have the goodness to explain yourself on that point.

B. I have already said, that the tread of a horse has much to do with the ill or well doing of his feet; but I shall here present you with a passage from Mr. Hinds, where I think you will meet with

a satisfactory reply. "When the pastern bones (great and small) rise one above the other too uprightly, the small one receives the whole concussion, and communicates the jar to the very minute construction in the internal foot. The jarring of his pace in them is very great, both to the horse and his rider. Such horses are very liable to go lame occasionally, but they recover by rest: the principal damage is done to the sensible sole *."

Again: "The just form or elevation of the foot in front, upon which mainly depends its form behind, has been discussed by various writers, but remains yet awhile uncertain and unsettled." Mr. Bracy Clarke judged thirty-three degrees of elevation from the ground to be the best form of foot. Mr. Hinds thinks (and so does Mr. Goodwin) it should be thirty-five, and that any material deviation from it is an approach towards disease. "Did we require," adds he, "more argument to prove this to be the proper elevation, a conclusive one could be found in the well-known circumstance of those hoofs of horses which are very upright in early life becoming the lowest when the animal gets old; whilst those hoofs which come near the standard of excellence in youth (forty-five degrees) retain the same form, as nearly as the injuries of shoeing admit of, to an extreme old age." This

* Mr. Hinds says—"I have found the best form of the hoof differ, according to the shape of the two pasterns, as they regard the hoof and each other: deeming that the best, in its particular case, where the small one follows the same declination as the hoof, and the large pastern descends twenty degrees nearer to the upright."

bears an analogy to the human frame. If the bones of the leg were perpendicular over the part which first touches the ground, we should come down with a sudden jolt; instead of which we descend in a semicircle, the centre of which is the point of the heel.

I have ever had an insuperable objection to horses with short upright pasterns; and when we consider that there are thirty-six bones in the foot of a man, in order that there may be so many joints, it is evident how our Maker has provided for the elasticity of our motion. Horses, then, with short and straight pasterns, may be compared to a carriage not placed on springs. They have no elasticity of motion; they are dead slow in dirt; and their feet are soon destroyed on the road.

The little extract I have taken the liberty of presenting you with from Mr. Hinds' work, on the proper form, or rather elevation, of the pastern joint as connected with the health of the foot, is very consonant to my ideas of one of the chief causes of foot-lameness, but to which *very few people* are sufficiently awake. How many hundred times have I heard a conversation similar to the following between two sportsmen by a covert's side:—"How fresh and well the old horse looks! How many seasons have you ridden him?"—"Ten; and his legs and feet are as good now as they were when I first had him." Now the questions arise—Why has this horse lasted so long? why are his legs and feet so good at the end of ten seasons? He has been ridden very hard, *and shod by at least fifty blacksmiths in his time.*"

I will answer these questions in a very few words, and I trust satisfactorily. In the first place, this horse has been in good hands and well groomed; but something else has contributed to acquire him the character of "this good old horse"---as sound at fifteen as he was at five years old. Yes; he is a good horse, BECAUSE HE IS A WELL-CONSTRUCTED HORSE: because (though this good property is not *always* visible) his shoulders are oblique; his arm comes well out of his shoulder; he has a finely-expanded knee-joint; a short cannon, or shank bone; and, above all, a strong, but oblique fetlock, at an angle of forty-five degrees, or near it---all of which combined give him an even tread*.

A. You have said this good property, by which I understand you to imply *proper structure*, is not *always* visible; may I ask you for an explanation of that expression?

B. I mean to imply, that we do sometimes meet with what are called "twisted forelegs" on horses which have stood sound to a late period of life; but so completely is a horse a piece of complicated machinery, it is possible that, despite of the twist in some part of his fore-leg, the tread may be even, and thus his feet have been preserved. Mr. Hinds speaks very rationally, and, in my opinion, very conclusively on this very important point.---"Some horses cut," says he, "in consequence of treading on the outer quarter; on the contrary, by punishing

* "The Phœnomena mare," says Mr. Hinds, "unquestionably the first trotter of her inches in our days, never did her work *in style*: nobody could account for her achievements, upon the view."

the inner quarter in treading, others contract a disposition to quittor and ring-bone: both instances of mal-formation, or *bad built* (as I call it), produce splents, diseases of the frog, of the sensible sole, and of the coronet, as the case may be. How the various modes of wrong treading are brought on, remains to be examined into hereafter. Meantime, it may not be amiss to observe, that the right mode and make may be *discovered* by noticing the proportions of those horses, that, by the acknowledged just symmetry of their bones, the agreement in size of one limb with another, and the faultless manner in which these are attached to the body, go tolerably free from any such diseases, until old age, accident, or the misapplication of their powers, brings on disease."

"There are," continues Mr. H., "three kinds of mal-formation, or bad shape, attendant on the limbs of horses, which I consider *original* faults; those others to which they give rise being but *secondary* ones. 1st. That wherein the leg is ill-formed in itself. 2d. When it is badly joined to the body. 3d. When the fore-legs disagree with the hind ones in length or quantity. Each---by being attended by its respective defect in *going*, as to safety, speed, or strength, and liable to incur one or other of the ills enumerated, as appearing on the legs and feet---is worthy of the reader's separate consideration; although it frequently happens that an individual horse is afflicted with all three faults at the same time; the two first being found together, subsequently producing the other also."

A. Although, in your Tenth Letter on the

"Condition of Hunters" (see *p.* 142), you attributed foot-lameness to several causes totally unconnected with shoeing, you appear now to lay more stress on the evils of a faulty tread of the foot than you did then.

B. I was always of opinion that the natural tread of the horse was most material to the welfare of every part of the limb---particularly of the foot; and hence I have always insisted on oblique shoulders, and good lax and springy pasterns; well knowing that without them there is no calculating on the services of horse-flesh, at whatever price it may have been purchased; but since I have resided in Hampshire this opinion has been unalterably confirmed, and I can illustrate my reasoning thus:---

Among the Irish and Welch peasantry, who from their infancy go in great measure barefooted, you see, by the thickness and roundness of the calf, that their tread has been a natural one, and consequently that the form of the leg remains natural; but meet a Hampshire-bred labourer of five-and-twenty years of age --- otherwise well enough formed---and if you look for his legs you can find nothing like legs. You will find two sticks, or bones, or rather *stilts*, which support his body, but the muscle has all disappeared, even at this early age. Since about his eighth year his foot, ancle, and toes have been confined so tightly by an iron-bound half-boot, made of leather of an almost unyielding substance, and very tightly laced, that a distorted tread has been produced by it; and thus have his legs and feet been injured.

A. It would appear as if you thought that the diseases of the foot of the horse sometimes have their origin in the leg.

B. Undoubtedly I do; for is not the foot a part of the leg? The posterior joint of the leg is situated in the foot. All diseases are secondary causes. When diseases of the feet cannot be traced to any specific cause, they are fairly attributable to ailment of the whole system dropping into the legs; and *fever in the feet* decidedly so, in my opinion, when both are so afflicted. Therefore it was that I noticed this disease along with the strain of the tendons, to which I attribute its origin, as much as to other causes of general heat of the foot. Indeed the whole structure of the foot of the horse is so peculiarly curious that it almost deserves a separate study; but we must keep in mind, whilst considering its ailments, that the great irritation kept up by its extreme action is readily communicable from the one to the other; so that we cannot intelligibly separate the leg from the foot when speaking of the ailments of either.

A. Are you not a bold man to attribute, comparatively, so small a portion of the evils of shoeing, good or bad, to the production of foot-lameness?

B. Perhaps I am, because on this subject people appear to be very tenacious of their respective opinions, and very apt to be cross with such as dissent from them, or venture to offer any of their own*;

* All writers on controversial subjects—this in particular—should take pattern by La Fosse. "These subjects," (foot-lameness, &c.) says he, "would be inexhaustible, if I should enlarge upon all those that are the subjects of this book; but I leave it to those of

and were I only a theorist, I should shrink from the task. Here, however, I bring the experience of facts to my aid, and take my stand on the hind foot. Independent of facts, however, it is an axiom in logic, that where certain evidence is not to be found, a number of probable arguments carry considerable weight with them, even in matters of speculation.

Now I think no one will dispute these facts:---First, the hind foot is a *fac simile* of the fore foot. Secondly, the hind foot is, as I said before, more unfavorably shod, as far as the tread is concerned, having generally, even for road work, *one side* of the shoe turned up; and for fast work in coaches, generally both. Thirdly, the frog, from the fact just stated (the calking or corking), never receives pressure from the ground, *i. e.* the road. Fourthly, it would be idle to say the hind foot does not encounter concussion: I maintain that it does, and to a very considerable extent. Look at a horse going in, what we call, a hand canter on the road---the favorite pace of all road riders who want to make haste---with fifteen stone on his back; will any one tell me this horse's hind feet do not strike the ground, when he is thus thrown back upon his haunches *with very considerable force?* I think no one can materially gainsay what I have now

my fraternity, who are more learned and skilful than myself, to publish what I may have forgotten; and hope that the little light I have thrown upon our art, which is yet too much in obscurity, will engage them to bring it to perfection; and for my part, I declare I shall be sincerely obliged, not only to those of my profession, but also to all lovers of horsemanship, if they will be so kind as to shew me my errors, as well as communicate their own reflections and discoveries."

stated; AND YET IT IS NOT UPON RECORD THAT A HORSE WAS EVER GROGGY, OR FOUNDERED, IN A HIND FOOT!

But, when we come to consider the point, is there anything extraordinary in this? Are there not diseases peculiar to the fore leg, and are there not diseases peculiar to the hind leg? Thrush attacks the fore foot; canker, the hind one. I never saw a splent on the hind leg, but I have seen hundreds on the fore leg. Ringbone attacks the hind leg---the foot indeed---twenty times for once we find it in the fore one. Sandcrack never attacks the hind foot, though in its form it is generally more upright than the fore foot. Stringhalt is peculiar to the hind leg, although I saw one instance of it in the fore leg. Inflammation of the lungs affects the fore feet; inflammation of the bladder, the hinder ones. As for spavins, curbs, and thorough-pins, they are naturally confined to the hind legs, the seat of disease being there.

But one word more about concussion, and its influence on horses' feet. Look at a race horse going over some of our English race courses, after two months' drought, with nine stone on his back, and at the very top of his speed: he is then covering from fifteen to eighteen feet at a stride, on ground as hard as marble; and it is quite evident that *the span in the gallop must give a shock in proportion to its length.* Now we find race horses often sore in their feet from this hard usage; their sinews also often give way, and now and then a bone breaks; but there are fewer groggy horses among thorough-bred ones that have been some years in

training, than among other descriptions that are put to hard work in the summer.

A. I hope you will enter more fully into what you consider to be the chief exciting cause of foot-lameness; and that you will not be afraid to speak out.

B. You must recollect the inscription which a celebrated ancient placed over the entrance into his school:—"*Let none enter here who is not initiated in science.*" This was an awkward rebuke, and might be justly applied to me were I to enter into all the intricacies of speculation which this subject has given birth to; but, undaunted by the criticisms of any one, I shall give you the result of my experience, encouraged by the well-known remark that there is no arguing against facts.

A. Of course you will shew us not only in what way a horse should be shod to prevent the probability of his foot being injured by wearing shoes; but also inform us how he should be treated, so as to ward off diseases and injuries which so often attack that most essential part, proceeding, *as you affirm*, from very different sources.

B. It is certainly my intention to make this attempt; and shall begin with preparing the foot for the shoe, and pointing out the proper position of the latter, which, as far as counteracting injury from the use of it, is a point of the very first importance. I shall, however, previously offer to your notice the following letter, which I am sure will be read with attention, as well as afford matter for comment. The writer is a well-known sporting Baronet, many years master of hounds; one who

has paid extraordinary attention to the shoeing of his horses; in whose house I have spent many pleasant months; to whose society I am indebted for much useful knowledge in the purchasing and management of hunters; in short, I may say of my friend, that he is "*vir harum rerum peritissimus.*" His remarks, it will be observed, chiefly apply to the necessity of placing the weight on the heels of the horse, instead of having them sloped away, to (what he terms) the great inconvenience and injury of the animal.

"DEAR NIMROD—According to your request I communicate to you my sentiments as to the best mode of treating horses' feet, and shoeing, as far as my knowledge on those subjects will enable me. No one doubts the necessity of keeping the feet free from pain and inflammation, which occurrences, whether arising from accidental or constitutional causes, always produce ill effect, and also some visible ones on the legs; and which effects, generally (I had nearly said in all cases in the first instance), are attributable to some imperfection in shoeing; and which, in my opinion, is the primary cause of all the crippled appearances so frequently seen in the limbs and motion of this noble animal.

"The mere mechanical process of fitting and fastening the shoes to the feet is done by most London blacksmiths, when pains are taken, as well nearly as it can be performed, provided the fashion (and there are fashions in all trades) of driving the nails too near the surface of the horn---in other words, not taking sufficient depth in the hoof---is

not fastidiously attended to; but which, if done to the nicety proposed, will never long keep the shoe fast, and must end in breaking away the portion of the foot through which the nails pass.

"Common experience therefore teaches us that two shoeings in London disfigure the feet more than six in the country; and from the sole cause to which I have alluded---namely, that of driving the nails too superficially, or too near the external surface of the wall of the foot.

"I am far from thinking that in other respects the feet of horses are not materially improved by the operations of the London workmen; for, in preparing the feet for the reception of the shoes, they have infinitely more skill and knowledge than any country blacksmith possesses: nevertheless they are not sufficiently scientific and observant to complete this most necessary part of the art on such principles as will ensure ease and comfort to the animal, and give confidence to the person who is destined to use it.

"The seated shoe is, without doubt, the most consistent with every principle of utility, ease, and safety, and therefore to be preferred. By it, all the sensible parts of the foot are protected, and those on which Nature intended to place the burthen are made exclusively useful---giving protection at the same time to every other part, and encouraging that expansion which gives relief and security in every progressive step taken.

"The description of this shoe is known to every one who at all reflects on the means of preserving the hoof in a perfect state, and my

observations shall be confined to paring the feet for the reception of it. On this subject, in some particulars, I believe I differ from many, and some of the esteemed and most skilful practitioners of the age, in the veterinary art. I imagine I differ from Mr. Field, the ablest man by far (from long experience and knowledge in the diseases of horses) of the present day; and from his son, the first brilliant star which ever shone in the science he professes, and, I might add, in any other in his time: and I come to this conclusion, that, with very rare and extraordinary exceptions, no horse ought to have corns to cripple the feet, or pains in them to render them uncomfortable; and, to prevent these maladies, the feet should be properly prepared, and the weight laid where it ought to press, *i. e.* on the insensible parts (for no sensible effects can be produced on insensibility, though visible ones may---I am sure I shall be understood by those who have knowledge); and consequently, if the iron should come in contact with the hoof properly, no injury can by possibility occur.

"On the heels of the feet it is obvious, then, that the greatest weight of the animal, and any additional weight with which it may be laden, should be placed; and therefore the heels should be lowered, and not shortened according to the old prevailing custom, so that the shoe may come well on the back part of the foot; and they should be lower than the extremity of the frog, *half the thickness of the heel of the shoe, whatever that thickness may be.*

"The heels should not be allowed to press on

the frogs, and the bars should be kept strong, and able to perform the functions required of them.

"I have no corns or thrushes, and I may add diseases of the feet, in my stable; and, as a general rule, I should say, if the horse be a hunter, and in use, keep the shoes only a little wider than the horn of the foot at the heels, shod only as long as the heels; and the shoes should be bevilled off at the heels, that the hind shoes may not catch. These are necessary precautions, particularly to those who hunt in deep countries.

"If the horse be used for other purposes than the field, the shoe should be equally divided on the heel; in other words, the heel should be exactly in the middle of that part of the shoe which covers it; and no shoe should extend beyond the heel, backward, after the foot has been properly prepared. I know I shall have a host to contend with in this particular. Nevertheless I am convinced (allowing there are some, and but few, instances to which this mode would not be applicable) that I shall have converts to my opinion after a fair and candid trial.

"The toes should be made short, to encourage the growth of horn in other parts of the foot, as well as for safety in the action of the horse; and the sole should never be made too thin, or thinner than when it will yield to the hard pressure of the thumb.

"If from these hints you and the public can glean any useful knowledge, I shall feel unfeigned pleasure; but, if I shall have laboured unprofitably, I shall experience only a limited satisfaction in

having endeavoured to comply with your wishes, without extending the benefits which ought to be the result of attentive observations and some experience; and which results, if successful, every liberal mind would gladly distribute for the comfort of the most useful and most ill-used animal in the creation.

"I remain, yours, &c.

"CRIBB."

"March 27, 1828."

A. I have perused your friend the Baronet's letter with great attention, and find he is well versed in the art of shoeing, having, it seems, taken much pains to become so.

B. You remember the speech Shakspeare puts into the mouth of *Portia* when describing to *Nerissa* the character of the Neapolitan Prince, one of her suitors: "Aye, that's a colt indeed, for he doth nothing but talk of his horse; and he makes it a great appropriation to his own good parts that he can shoe him himself: *I am much afraid my Lady his mother played false with a smith.*" The sarcasm of the Bard, however, does not apply to the author of that letter. "My Lady his mother" played false with no one; neither can my friend talk *only* of a horse: but this much I will say, if fortune had not bestowed ten thousand a year upon him, he would have been a capital blacksmith.

A. Of course you will favour us with a comment or two on his letter.

B. Not at present. I shall wait and see whether I am not anticipated in that task by some of the veterinary profession, being bound to give them the precedence. The only remark I shall at present make on the subject is, that I perfectly agree with Mr. White, when he tells us, that many people have attended chiefly to the *form* of the shoe, and not to its *application* to the hoof; which error has done more mischief, and made more enemies to the Veterinary College, than all the prejudices of grooms and farriers.

A. Although you have spoken lightly of shoeing as the general and proximate cause of footlameness, yet I imagine you are a great advocate for its being done scientifically and well.

B. Mr. Coleman has told us, that, if the art of shoeing be judiciously employed, the foot will not be more liable to disease than any other organ; but I must withhold my assent here. I have already said there is a disposition to inflammation of the laminæ of the foot, when the whole system, as well as the individual part, is much excited by work and high keep, which the shoe has very little to do with; neither is this all: much as I admire the internal structure of the hoof of a horse; much as I am convinced that it bears the stamp and impression of Divine art; yet it is not, neither can it ever be, made equal to the uses to which we put it, although it may be so to all the functions required of it in a natural state; and, therefore, shoe them how we may, we shall always have lame horses.

A. Coming to the point then, tell me, first, how you think a horse's foot should be prepared for his shoe; and, afterwards, how he should be shod.

B. The man is yet unborn who can answer either of these questions in the way you put them. Almost every horse's foot has some peculiarity attached to it; so it is quite impossible to prescribe any general rules here. It is indeed by attempting to apply general principles that much mischief has ensued.

A. Will you detail to me a system to be pursued with horses' feet most likely to preserve them in health and their natural form to a late period of their lives?

B. I am not altogether well adapted for this task, and for the following reason --- very few horses have remained in my possession more than three years, and by far the greatest part of them not for so long a period. I had one, however, fifteen years in my stable, with the exception of three months' run in the winter; and I will tell you the result of that individual instance. This horse became my property at seven years old, having been out of training about two years. He had a strong narrow hoof, with almost perpendicular heels (much inclined inwards); small but healthy frogs; and beautifully formed pasterns. He was struck with foot-lameness in his twenty-second year, and shot; but previously to that time he was never known to be lame in a foot, standing road-work particularly well. I observed the following plan as far as regarded his feet. I never suffered his shoes to remain on more than a month,

and often not so long, before they were removed; and his hoofs were generally stopped with damp tow. I take it to be highly important to regulate the periods of shoeing and removing, according to the nature of feet; and I am convinced great mischief is the result of a contrary mode of proceeding. A gentleman asks his groom if his horse does not want shoeing? The groom looks at the *shoes*, whereas he should look at the *feet*. Some horses can scarcely wear their shoes too long; others require the drawing-knife to their feet at the end of three weeks. I will now endeavour to point out in what way I like to have my horses shod for the road and field, and how they should be treated in the stable, as far as relates to their feet---always bearing in mind the well-known axiom, that Art is never so perfect as when it imitates Nature. Having commenced with a notice of it, I will proceed to the strong foot.

A. Have the goodness to explain to me what you mean by a strong foot.

B. By a strong foot, I mean one which is deep and hollow, when the crust is always thick and strong. This is a foot which requires to be frequently *refreshed* (if I may be allowed the expression) by application of the drawing knife, and should be pared down low. It has a great disposition to secrete horn, the strength of which may create a compression on the interior parts of the hoof, and which, when added to the exciting causes of high keep and work, may produce lameness in spite of the best shoeing. The toe of this foot should be kept short, as it will cause the entire of

the hoof to flourish, and to shoot out new horn from the coronet. If contraction be ever the proximate cause of lameness, the stricture of this deep crust, when assisted by hard riding, is said to produce it, by bringing on ossification of the cartilages of the foot, by which its action is destroyed. When this takes place to a great degree, what is called *anchylosis* is produced, and the animal treads as it were on stilts. I have a mare in my possession which is a true specimen of this extreme degree of foot-lameness.

A. May I now ask you to describe a weak foot?

B. A weak foot is one that greatly imposes on young, and indeed I may add old, purchasers of horses. It is generally of a circular base, with open heels, and a fine flourishing frog. This foot cannot well be shod too seldom; and, when shod, the sole should be pared with the greatest caution, as there is at the best of times scarcely enough of horn to protect the internal sensible parts. The heels of feet of this description are also generally low, causing considerable strain on the flexor tendons of the leg. For this reason horses with low heels should have their toes kept short, which will cause their heels to grow higher. Weak and thin feet cannot be kept too dry, all wet stopping being injurious to them. On the contrary, the use of the tar ointment, or anything else that will nourish and harden the sole and crust, is to be recommended. Feet of this kind are not altogether to be discarded for hunters, but they require considerable care; and there is one bad property

belonging to them---namely, if a shoe is cast, they are unequal to the weight of the animal they belong to, and he must be led in hand to the nearest blacksmith's shop.

A. How should feet of this description be shod?

B. The drawing-knife or batteris must be very sparingly used; rather a wide, but at the same time light, concave-seated shoe should be applied, and the toe kept short. Great pains should be taken in the application, as well as the form, of shoe for a foot of this description; and the more points of support that can be given to it, the better will the horse travel.

A. Is it absolutely necessary the shoe should be seated?

B. By no means. Feet of this description have generally sufficient concavity of sole for any other shoe, without their receiving pressure to occasion lameness---particularly so, if attention be paid to the crust to prevent its wearing away. If room be left between shoe and sole to pass the point of a picker, no danger is to be apprehended from any form of shoe, provided it be well fitted to the foot.

A. Are feet of this form liable to disease?

B. Equally so with those of any other when exposed to strong exciting causes---*the pace* for instance, and *keep proportioned to the pace.*

A. What is the most difficult foot to preserve in a sound or even useful state?

B. That to which the name of *pumice* is given; and to which the foot I have just spoken of *in*

some measure approaches. When we consider that in a pumiced foot, such is the convexity of the sole, that when the horse is barefooted his weight rests upon it instead of the crust, we can easily conceive the difficulty there is in applying shoes to it.

As the pumiced foot is most commonly the result of fever* in that part, I consider myself fortunate in only having experienced two cases of it in my own stud. One was such a bad one that I gave it up in despair; but the other happening to the best hunter I ever was possessed of, I took great pains, and restored him. According to Mr. Goodwin, all horses are subject to pumiced feet that are put to fast work. "In horses," says he, "where the secretion of horn is insufficient to meet all the purposes required (and my observations lead me to estimate their number at about one half), it (*i. e.* pumice) is found, even at an early age, after having been shod a few times only; for as the crust and laminæ are thin and weak, they are unequal to support the weight which Nature intended, by which the peculiar structure and connection between the horny and sensible laminæ should be chiefly borne by them. This does not wholly arise from a defect of Nature, for Nature did not intend that the animal should be shod, kept in hot stables, or go so fast upon the hard roads. As the disease increases the coffin bone and the internal contents of the hoof sink, and bear down upon the horny sole, which,

* Mr. Goodwin (whose authority I will not presume to question) says, the principal cause of pumiced feet is a defective production of horn in the sole, crust, and laminæ, the frog being generally stronger than the other parts.

being thin and weak, gives way, soon losing its concave appearance, and becomes convex*."

After this explanation of Mr. Goodwin no more need be said of the cause of pumiced feet, when *not* proceeding from fever. The treatment of this disease requiring all the art of the veterinarian, I shall not enter into it farther, but merely state how I treated my own horse, whose feet were decidedly pumice, and I never rode him a good run in a deep country that he did not lose one, and generally both, of his fore shoes.

I set to work with him in the summer months. I rasped down the crust of his two fore feet nearly to the level of the sole, and then as nearly as possible followed the advice Xenophon gives in his *De Re Equestri;* being well assured that the preservation and hardening of the base of the foot must have been an object of vast importance previously to the use of shoes---it being, indeed, as we learn from History, one of the most valuable points in consideration in the purchase of horses for the saddle.

According to the instructions of the Athenian, I made my horse stand bare-footed on round stones, or *pitching* as it is called, for three or four hours each day, which, as it were, forced the sole back by their pressure, and soon altered the form of his feet. I should however, observe, that, previously to

* Doubtless Mr. Goodwin is right here as to the coarser sorts of horses, particularly those bred in low countries, whose feet are soft and spongy; but with well-bred hunters, pumiced feet are, nineteen times in twenty, the effect of fever. I am happy, however, to observe here, that I am seconded by Mr. Goodwin in my assertion that shoeing has often nothing to do with foot-lameness.

putting him on the stones, I made him stand for six hours without his shoes on a level surface of flags, the propriety of which I have since had reason to doubt. As in his case the sole had not descended low enough to come in contact with the flags, I imposed too much weight on the crust and laminæ, and therefore did what is wrong. However the result of the experiment was satisfactory. I rode my horse another season; he did not cast his shoes as before; his feet were very much more concave, and I sold him for two hundred and eighty guineas. I should add, that I made free use of the tar ointment to every part of the foot, and kept the toes short.

A. Did you never suffer from feet of an opposite form to those you have now been describing---I mean those unnaturally concave?

B. No: with the exception of the old horse just spoken of, the only cases of foot-lameness I have been subject to have been those of, apparently, naturally-formed feet, wide and open in the heels, circular at the base, and shewing no symptoms of compresssion in front. Perhaps I may attribute my good fortune here to my constant practice of never suffering shoes to remain on healthy feet more than three weeks or a month at farthest.

Of the two extremes I should much prefer the over-concave to the over-convex foot. The former, by care and good grooming, can generally be preserved to a good old age; but for the latter, palliatives, but no radical cure, can with any certainty be looked for.

A. Having described feet of various forms, will you now give me your idea of a perfect foot?

B. I have long found out that there is scarcely anything in the world of nature or art that comes under that denomination. My experience has shewn me that there is a mixture of wisdom and folly, vice and virtue, good and evil, both in men and things, and consequently I do not look for perfection in anything. I will, however, tell you what I consider *a good foot*, and one likely to endure to old age, with the assistance of good grooming, or else none at all.

A. What do you mean by the assistance of no grooming at all?

B. Well may you ask the question; it is certainly a negative virtue: but is it not a well-known fact that poor horses---gipsies' horses, and those which lie about in lanes---are seldom lame in their feet?

To begin: I like a moderately-sized foot, moderately concave, which ensures a sufficiently strong crust; but much depends on its being composed of well-tempered horn. I like to see the crust strong at the heels and quarters, being then more likely to resist the effects of an ill-applied shoe; and I have always found high heels the best to stand hard-riding on the road. Indeed the best feet I have ever met with for this purpose have been the mule-shaped ones of Irish horses, and, next to them, the Welsh. I prefer open heels, if naturally so; but I would never suffer them to be cut away for appearance sake. As Mr. Goodwin

says, a horse's heels should be *well back*, and the nearer they approach to the back of the frog the better. As to the frog, I like to see a good one; but I have seen so many horses that have remained perfectly sound in their feet, after very severe trials, to a late period of their lives, with scarcely any frog, that I confess I do not lay so much importance to this much-talked-about organ as my reading upon it might induce me to do. The theory is beautiful certainly, but practice lessens the force of it.

The following passage from Mr. Goodwin (so much to the purpose) shall close my remarks on this part of my subject:—"The hoofs of horses are constantly growing; the crust is secreted or produced by the coronary ring; the horny sole is secreted by the sensible frog, and the horny laminæ by the sensible laminæ; all of which are elastic, and have motion. The weight of the horse is sustained by the internal and superior part of the crust, the laminæ connecting the coffin bone to it; and the weight is in this case suspended to the inside of the hoof."

Again: "When the navicular and coffin bones are pressed down by the superincumbent weight of the animal, the laminæ elongate, and the crust is drawn downward at the same moment. As these bones descend, the horny sole also descends and flattens, which forces the heel, quarters, and bars to expand, at the same time that the weight is removed; as, when the horse is in action, and the foot is off the ground, these parts again contract, producing an alternate expansion and contraction.

The extent of motion in the crust, when supporting the weight of the animal, *will depend on its thickness and power to sustain it.*

"This is well shewn by the difference of appearance between a strong hoof and a weak one. The former presents a regular slope from the coronet to the lower part; whereas the latter becomes hollow, wrinkled, and deviates greatly from the straight line; and the curve is oftentimes so great as to give the hoof the appearance of turning up at the toe."

A. The difference between a perfect and imperfect hoof is satisfactorily explained here by Mr. Goodwin; but how is it that you have not quoted Mr. William Percivall on this interesting subject?

B. For the best of all reasons—I have nothing to quote from his able pen. In the last page of his last Lecture (vol. iii. *p.* 502), he thus writes:—"The foot has been passed over by design. I considered that what new or original matter I might have found to offer on the subject, would hardly warrant me to break up that ground afresh which has already been so extensively cultivated, through the labours of Messrs. Coleman, Clarke, and Goodwin; and, therefore, I have refrained from making this important part an unprofitable addition to the present series of lectures."

A. Have you suffered much from fever in the feet of your horses after very severe work?

B. Not a great deal; only in two instances to the irremediable lameness of the animals afflicted, though I had others partially affected. Having always been in dread of this severe visitation, I have

made it a rule to take precautionary measures with horses I have considered not quite fit to go; and it is with such that the mischief generally prevails. I have, however, long been of opinion, that fever in the feet, to a certain degree, attacks horses much oftener than we suspect, and that it is a very general cause of lameness in the fore-feet. Mr. Hinds has the following passage on this subject, which is very confirmatory of what I have advanced:---"When we reflect upon the strict accordance between the structure of the fore foot and the hind, and then look over and lament the numerous disorders that the first is liable to, whilst the hinder one is comparatively free, *it gives us reason to pause*. But without entering upon an elaborate investigation of this difference as to health, I come to the conclusion, that we ought to attribute diseases of the feet, as I have already those of the body, to the excessive heat of the vascular system, promoted by the great exertions the animal is put to, and the rude concussions the fore-feet in particular endure at every step, thus creating heat, and attracting hither any evil humours that may afflict the body generally."---Again, Mr. Hinds thus writes at page 472:---"Time and hard work, and the heat of the blood, occasion brittle hoofs, and distortions, with numerous disorders, that attach to the foot generally, or belong to the sole only."

There is a remarkable passage with which Mr. Goodwin commences his tenth chapter of the second edition of his excellent work on Shoeing. "When I published my first edition," says he, "I omitted to devote a chapter to this subject—namely, Fever

in the Feet; for at that period I did not consider it to be strictly connected with shoeing. However, since then I see it in a different light, and have been induced to offer some observations on this disease."—Now in my humble opinion—for I still speak with deference, and am only guided by what I have seen—fever in the feet is to a certain degree connected with shoeing, inasmuch as to its influence are *the changes in the form of feet* in great measure to be attributed; and to accommodate the bearing of the shoe to those changes, should the attention and skill of the shoe'r unceasingly be directed.

Mr. Goodwin thinks that fever in the feet is often produced in hunters by their taking high leaps on hard ground, or going fast over stones or flinty ground; also by a chill occasioned by riding the animal into water when heated; and likewise by standing some months on board a ship, without any other support to the foot but what is derived from the crust---producing inflammation of the laminæ. This is all very true; but with hunters it *generally* proceeds from over-excitement of the vascular system, by high food, and severe work.

A. Do you approve of the use of sponge boots and warm water to the feet and fetlocks of hunters after a very hard day's work with hounds?

B. With horses which have naturally good and strong feet, I very much approve of them, and for this reason---there is always inflammation of the glands, which the warm water is calculated to abate, and all kinds of fomentation serve to prevent induration of the ligamentous parts of the feet,

fetlock, &c. Osmer mentions a fact that fully confirms this: "When the fetlock of a stag, which had run many miles before hounds in dry and hot weather, was dissected, the mucus was of a very sanguine colour; and this must be the case with horses which carry high weights, and receive jars in their limbs from leaping."---I always treated a horse I rode four seasons, and who was generally very sore after severe work, in the following manner, and found the greatest benefit from it. His feet and fetlocks were well fomented with hot water, and then lapped up in flannel, and the sponge boots applied; but previously to the application of the latter his coronets were well rubbed with spirits of turpentine, which created a strong irritation of the surface, as was apparent by the restlessness he evinced for a short time afterwards. The effect of this operation, however, was very apparent on his going to exercise the next morning, as he moved comparatively sound. The external application relieved the interior inflamed parts, and, by keeping the outer sole thin, he continued sound enough for a hunter till his fourteenth year. This horse had had an attack of fever in his feet, and, but for the care I took of him, would have had pumiced soles, and not worth his skin. It is to horses of this description that loose boxes are indispensable.

A. You speak of the *outer* sole; describe to me what is called the *inner* sole.

B. The inner sole is nothing but an expansion of one of the flexor tendons of the leg continued to the bottom of the foot, covering the navicular bone.

A. Will you describe to me what you consider the best method of treating and preserving the feet of horses in the stable at all periods of the year?

B. Great discrimination is to be used with horses' feet in the stable --- I mean as regards stopping. With such as require stopping I have always used damp tow, in preference to clay and cow dung, because, if there does exist a necessity--- which Nature points out to us there does---of a uniform pressure on every part of the foot, tow certainly affords it, as will be seen by the impression made upon it by the foot when taken out with a picker. It is, however, necessary to observe, that a horse is not a duck, and that the constant application of moisture to his feet is not only not necessary, but very often injurious. I have had several very sound horses whose feet I never stopped at all; on the contrary, I kept them as dry as I could, by the application of the tar ointment. To such feet moisture is injurious. There are some soles, as well as frogs, which can only be preserved sound by keeping them dry in the stable, and promoting the secretion of horn by the use of the tar ointment only.

For horses whose feet are strong, and rather inclined to inflammation, I am very fond of what is called the *swab*, which, when well saturated with water, is tied round the outside of the coronets, hanging over the entire of the crust. I have seen the best effects produced by use of these swabs in promoting the growth of horn from the coronet, to the very great improvement of the foot; but I have yet to see any improvement of this sort the result of internal stopping.

A. Will you tell me the best way to treat the feet of covering stallions, and all other horses which remain for a long time in loose boxes, without being exercised and groomed?

B. I think no covering stallion should be so treated, unless he is a cripple; but on this head I will give you better authority than my own. "Horses," says Mr. Goodwin, "when constantly kept in a loose place without work (and this applies particularly to covering stallions), are suffered, as their shoes have little or no wear, to remain a much longer period without having them removed than they should be; and their feet become exceedingly diseased and distorted in consequence. The best treatment to follow with horses so situated is, to cover the base of the foot with a strong leather sole, the heels having been previously rasped to a level with the frog, and the toes shortened. The leather sole should be soaked in water to render it pliant, and an iron tip in the shape of the foot, should be riveted to it: a compress of tow, saturated in an unguent of hog's-lard and tar, should be placed in the cavities between the bar and the frog, and also into the cleft of the frog; the sole with the tip should be then nailed on. This defends the frog from the effects of urine and dirt, and preserves it from thrushes; at the same time that it affords an elastic bearing to the sole, and expands the hoof by the pressure it affords to the whole base of the foot." Owners of horses obliged to be kept always in the stable---as many are---will do well to attend to these directions of Mr. Goodwin.

A. Have you suffered much from thrushes?

B. I do not recollect a single instance of having a horse out of work from a thrush. The horse I have spoken of as having been fifteen years in my stable was often threatened with thrush in the frogs of his hind feet; and being of a foul habit, and a greedy feeder, he would no doubt have suffered from it had he been in some stables: but the great attention I paid to his general health, in consequence of his chronic cough, prevented it coming to anything serious. I confess myself a complete sceptic as to thrush being the consequence of want of pressure on the frog. I take it to be nothing but a vent for foulness of habit, and a run at grass in a wet summer is almost a certain promoter of it. Were I a veterinary surgeon, I should make no bones about stopping a running thrush, which so many of my friends, not of the profession, have been afraid to do, lest blindness should be produced by it---the balling iron will always in this instance be a match for the dreaded evil: neither should I be sparing of the knife; for we can never expect a union of sound with unsound flesh. The reader may be convinced that neither thrushes nor corns will molest his hunters to any amount, if he will only keep them from running wild in wet pastures, and not suffer their systems to become foul!

A. Did you ever try Mr. Cherry's elastic pads for stopping horses' feet?

B. I have; and I think the principle on which they are intended to act is a good one. Without at all assenting to the fiat of Mr. Coleman, namely, that

"*the frog must have pressure, or be diseased*," yet, as it is quite evident that when a horse is running wild on ground which will receive the impression of his foot, every part of the ground-surface receives pressure from the earth on which he treads, there is fair reason to believe Nature intended such should be the case, and designed her work accordingly. Again, by dividing the weight of the animal, the crust and laminæ are relieved, and therefore advantage is gained by equally distributing the pressure; for it is in great measure owing to imposing so much weight on the laminæ and crust that pumice feet are produced. "Hunters," says Mr. Goodwin, "derive the benefit of this partial bearing on the uncovered parts of the foot during the time they are in the field:" but when we consider the length of time they are in the stable without this relief, and the violent concussion the feet sustain in hunting, it is a matter of surprise that they are not more often subject to disease than we now find them to be. "Professor Coleman," says Mr. Cherry, in a small pamphlet which he published in recommendation of his elastic horse-pads or stoppings, "has repeated, at page 33 of his book on Shoeing, the well-known fact, that 'no animal, or any part of an animal, can be preserved in health, where the natural functions are perverted;' but with the physiological fact, *that every part of an animal, to continue healthy, must perform its functions*, so strongly impressed on his mind, and so much insisted on by him on all occasions, he seems, in his zeal to enforce the necessity of pressure to the frog, to have totally overlooked *the sole*, notwithstanding it forms about

two-thirds of the ground-surface of the foot, and is naturally so much exposed."

Now we must admit the force of Mr. Cherry's remark---that is to say, he has an equal right to enforce the necessity of pressure on the sole, as the Professor has on the frog; and doubtless the elastic stoppings he has invented ensure that pressure more equally than the mere stuffing in damp tow, which I have been in the habit of doing for several years past. I must, however, add one remark here, in allusion to the general cry out for pressure, and the stress laid by veterinary writers on the evils of horses standing in stables deprived of this pressure, except on the crust and laminæ. Now, were my horses to stand on bare pavement, I should cry out as much as they do; but when I go into my stable, and see my horses standing on a good bed of dry straw, I am well convinced *that there is pressure both on frog and sole*, which the shining appearance of the frog plainly denotes, although that frog may be half an inch from the ground when the foot is placed on a level surface.

From the elastic nature of Mr. Cherry's pads, they are undoubtedly well calculated to create that kind of pressure, which he properly terms *support*, to the sole of the hoof, which it is presumed it receives from the earth, partly by its immediate contact, and partly by supporting the hoof to which the sole is attached. Experience has shewn that an unyielding support to this part---an iron shoe, for instance---cannot be endured with impunity; therefore custom has sanctioned its being left without any to the under-surface of it, which he proves to

be injurious. Whether this be or not the real state of the case---that is to say, whether pressure on the entire ground-surface of a healthy hoof be absolutely essential---I will not take upon myself to determine; but had I heard of these elastic stoppings at the time I was doctoring the horse I have lately spoken of for a strong disposition to punniced feet, I should have had great expectations from the use of them. Mr. Cherry's own words will best confirm the reasonableness of my hopes:---"Many of these feet," says he, "with a full frog and the hoof circular, have the latter thin and weak; the sole is thin and weak in the same proportion; so that the foot, instead of having a certain degree of concavity, becomes flat, and in many cases convex. When convexity takes place, all sorts of expedients in regard to the form of shoes are had recourse to; but none of them arrest the progress of the evil, since they are all resorted to with a view to prevent the sole being pressed on. But when these expedients can no longer be employed with effect, the treatment which I have suggested as being advisable, generally in a moderate degree, is adopted to the opposite extreme, and the soles, from having had no pressure at all, are, by taking off the shoes, exposed to pressure in the greatest degree. This is done with a view to relieve the hoof, and at the same time to press the sole upwards towards its original situation. In these weak feet, the benefit to be derived from filling the concavity of the foot and shoe with some substance that shall give support to the sole, must be peculiarly evident; since, by giving uniform and constant support to a weak sole,

and thereby relief to a weak hoof, the tendency to flatness and convexity will in most cases be overcome, and the necessity for rest without shoes be prevented."

Now as thinness of hoof and sole is a very common occurrence with hunters, occasioning (saying nothing of apprehensions of unsoundness) great trouble in the management of the feet, and difficulty of having their shoes secure, it is a great point gained if a remedy for the evil be produced; and without being able to speak from experience, not having sufficiently tried them, it certainly appears probable that Mr. Cherry has succeeded here by the means of his elastic pads. Mr. Coleman, it seems, has not insisted on the necessity of pressure on the sole, trusting to the crust and frog for support; although, as Mr. Cherry observes, the sole forms two-thirds of the ground-surface of the foot, and is naturally so much exposed. Now the following passage, with which Mr. Cherry concludes his pamphlet, is greatly in favour of his presumption, that all parts of the hoof should contribute to the support of the body:—"If the ideas that I have expressed of the form and functions of the horse's foot are correct, there can then be no doubt, that to make him stand on the hoof only, or even on the hoof and frog jointly, without pressure or support to the bars and sole, is a violent perversion of the functions of all those parts, and tends to produce contracted feet when the hoof is strong, and convex feet when the hoof and sole are weak; and that to keep the hollow of the foot filled with any stiff substance that can be forced in by the

strength of a man's finger or thumb, under the precaution before mentioned of picking out the foot every day, or with any substance capable of affording support to the whole surface of the foot, is one of the means most likely to diminish those evils."

Three years ago I made considerable use of Mr. Cherry's elastic pads, considering them an improvement on my former system of the damp tow: for various sorts of sound feet I still consider them so; but my experience led me to doubt their good effects on those which are to a certain degree foundered. Indeed when I used them with a mare I then had, evidently injured in the navicular joint---but, with attention and care, sound enough for any purpose---they produced inflammation and suffering, so much so that I was obliged to discontinue them.

There was another objection to them in my stables, as my horses were lying loose: they were frequently found to have quitted the foot, and a considerable time was occupied in hunting for them in the straw. On my mentioning this defect to Mr. Cherry, he assured me it could be remedied by being more careful in selecting those which exactly fitted the foot, but which grooms will not always trouble themselves to do. Were it not for this trifling inconvenience, I much admire the principle of them, and strongly recommend their use in flat and weak feet, as also in all others that are sound, being very likely to contribute their share in keeping them so.

No one can read what I have been now writing without feeling convinced how completely in the

dark all the old codgers of the last century must have been, when they were for ever dinging into the ears of the young ones that they were destroying the feet of their horses by suffering them to stand upon litter. *Their* practice, if there be any truth in modern discoveries, was the one of all others most likely to injure their horses; for, having the litter taken from under them in the daytime, they not only could never rest their feet by lying down, but the weight of their bodies was alone supported by the angular rim of the crust (for in those days the frog was generally cut away), imposing more weight on the laminæ and other sensible parts of the foot. I consider a clean bed of straw most essential to the well doing of horses' feet; and it is quite clear that when at grass in dry summers the injury I have alluded to cannot possibly be avoided, as little or no natural stopping is then to be found, to help to divide the burthen with the crust. Take up the foot of a horse at such a period as I am speaking of, and, even if shod, it will be found to be free from dirt, which is shaken out in the act of stamping the ground to scare the flies; and if not shod, it is impossible there can be any.

A. As your horses must have been shod by a vast number of different hands, of course you have had several of them what is called pricked in shoeing, or injured by the nails, in the sensible parts of the foot?

B. Strange to say, I never experienced an injury of this nature. I have, however, always been unable to account for the infrequent occurrence of it in this country, for, until late years, he was

reckoned the best workman who could drive a nail highest into the crust, and of course nearest to the quick. I have often interrogated these artists as to how they could so nicely judge their distance, when the answer has uniformly been—"Oh! the head of the hammer tells when we are going wrong:" that is to say, they are directed by the sound the nail emits when propelled through the horn. When, however, we consider how completely these gentry are ignorant of the *internal* structure of the foot, the rare instances of foot-lameness from the wrong direction of a nail may be almost recorded amongst the miracles.

A. What do you think of the French system of shoeing?

B. I think we have taken some useful hints from our Gallic neighbours as to the direction of the nails, when the system is not carried too far. I cannot do better than give you a short quotation from Mr. Hinds on this part of my subject:—"Notwithstanding the French method of punching has been spoken of in terms of approbation, and their mode of driving and clinching *low* is recommended to imitation, let it not be supposed that in other respects they make the best shoeing smiths in the world, but the contrary. Their finest shoeing is sad slovenly work to look at; and this very excellence of theirs is more attributable to laziness than to design or plan. As one instance of this undesirable quality, they assign two men to placing the shoe, a lacquey holding the foot and bringing the tools, whilst *le marèchal* himself hammers it on with much pomp."

Mr. Goodwin has an admirable chapter upon *nailing*, in which he says, the various methods of nailing on the shoes of different countries all partake, more or less, of the French system; from which, on the modified plan, he thinks the preservation of the crust and the security of the shoe are very advantageously combined. For my own part, I have always considered the native French shoe, with a convex ground surface, only fit for a pumice-footed dray horse, and such as never ought to be carried more than three miles in the hour.

A. Do you think foot-lameness is increased in this country within the last twenty years?

B. Certainly; the fine state of the roads has increased the pace of all kinds of travelling, and inflammation of the feet has kept pace with it. Where limestone is used on MacAdam's plan, corns are produced in great abundance, as well as other inflammatory attacks of the internal organs of the hoof.

A. I think you have satisfied my curiosity, if you have failed to convince me, on the principal points connected with foot-lameness; and you may conclude the subject with informing me in what way you think the foot of a horse should be prepared for the shoe; and then how the shoe should be formed and applied.

B. You have given me enough to do, but I will not shrink from the task; and shall give you the result of my experience, and nothing beyond that. I shall also venture to state, that as the diseases of feet are only, in my opinion, partially attributable to shoeing, measures quite unconnected

with the blacksmith are essential to the soundness of studs, in whatever work they may be employed.

I will commence this part of my subject with preparing the foot for the shoe. Here no general rules can be applied, but we should follow Nature as nearly as we can. If we find the base of the foot approach to a circular form, and the sole concave and firm, very little skill is necessary in preparing *the hoof;* and as to *the shoe*, all that is to be done is, to take care that it corresponds as nearly as possible with that form. There is, however, one general rule which cannot be deviated from; viz. *either the hoof or the shoe must be concave*, as the sole cannot bear pressure from so hard a surface as iron, although it may endure it from Mr. Cherry's elastic pads. Mr. Goodwin says it is impossible to suggest a form of shoe which can admit of all the functions of the foot being duly performed; which, if correct, shews the necessity of adopting that which does the least injury; and such will be the one that corresponds the nearest with Nature.

From La Fosse downwards to the writers of the present day, fears have been expressed of the ill consequences of paring the sole, which my experience cannot confirm. On the contrary, my experience has taught me that the soles of horses that feed highly, and are put to severe work, should never go more than three weeks without this operation being performed. Indeed I have given it the appellation of refreshing the feet; and so far from its having the effects so many authors have ascribed

to it---namely, of producing contraction and founder ---I am decidedly of opinion that less danger is incurred of injury to the navicular or shuttle bone (and other internal parts of the hoof, which are put into motion when the horse is in action), *by keeping the sole elastic;* and this, in strong, healthy feet, can only be done by the frequent use of the butteris or drawing knife---unless in cases of horses being ridden over flinty ground in the winter months, which of itself has this effect. I heard a very hard-riding gentleman say that he had his horses either newly shod or removed every fourteen days*! With regard to the frog---being a sceptic as to the necessity of its coming into contact with the ground---I have never troubled myself much about it, leaving it to the discretion of the blacksmiths of the present day, who seldom cut away more than the rotten or superfluous parts; and if they do, Nature very soon supplies the loss.

On preparing the hoof for the shoe, Mr. Goodwin anticipates all my wishes on that essential point. "When hoofs," says he, "are protected by shoes, the consumption of horn by wear and tear is nearly prevented; but as the growth of the hoof is constantly going on, it is evident that all the

* The evils of not removing shoes in time are clearly pointed out by Mr. Goodwin:—"The starting of the clinches," says he, "arises from the shoe getting closer to the foot after it has been on a short time; and as the bearing is only on the outward edge, it imbeds itself in some degree within the crust: thus the distance between the nail-hole on the foot-side of the shoe and the clinch must be shortened; so, as the shoe gets closer to the foot, the clinches are pushed farther through the hoof, which produces the starting of the clinches, and invariably attends the English manner of shoeing."

superfluous parts will require to be removed at every period of shoeing; otherwise it would run into a state of exuberance, similar to the human nails if they were not cut. The first part to be reduced is the toe, which should be removed with a knife or rasp on the sole-side of the foot, keeping in view the necessary curve. The next parts are the heels, which should, if they descend below the frog, be rasped to bring them on a level with it. Having attended to these two points, it will then be seen how much it is necessary to remove from the quarters, leaving them full and strong, but in a straight line from the heels to the curve, which allows the foot, when in action, a flat part to land on, and describes a space equal to the landing part of the foot when shod with a straight shoe. This direction differs a little from the French 'adjusting balance,' inasmuch as they direct four points of adjustment at the toe, and two at the heels, which leaves the quarters rounded, and renders the foot not so secure on the ground. The sole must next be attended to; the superfluous parts which have appeared since the last shoeing should be removed; this will leave it concave, and the crust or wall lower than the sole. The next and last part which requires attention is the frog. If it be full of horn, firm and even on its surface, cleft, and sides, it will not require the use of the knife; but if it be too large, rough, or uneven in its appearance, all the superfluous parts should be removed in the way I have described in the chapter on *Thrushes*. The foot will now be ready to receive the shoe."

Mr. Hinds has the following passage on Shoeing, which very much accords with my ideas and experience:—"Some feet," says he, "have the wall very thick, and the shoe will require a good bearing; if very thin, it cannot carry a heavy shoe, though it stand most in need of defence. Again, the horn of some horses' feet is so well tempered and stout, that they may be permitted to go without shoes without danger, if not worked on stony roads. *Time, however, and hard work, and the heat of the blood, occasion brittle hoof, and distortions, with numerous disorders that attach to the foot generally, or belong to the sole only.* When these ailments begin to shew their effects, the actual shoe-maker, or 'fire-man,' as he is called, must adapt his work according to the new pattern thus cut out for him; and here begins his ingenuity. In some cases he will even have to adopt a differently shaped defence for the same set of feet."

In preparing the foot for the shoe, I wish not to be thought an advocate for *too much* paring away of the sole. Always submissive to higher authority, I do not presume to say that disease may not be produced by carrying this process to an extreme. That the soles of hunters, however, or of any other description of horses which are subject to high excitement of the system, should not be suffered to grow luxuriant, is a fact my experience justifies my pronouncing, with the firmest conviction of the truth of it.

I can remember the day when country blacksmiths knew nothing of what we call the bars of a

horse's hoof; and I do not believe we had more lame horses than we have now, if so many. I admit it looks well to see a foot prettily drawn out, with these bars well defined; but I confess I think there has always been a little humbug here.

Of course the crust or wall of the hoof must be pared to give a new foundation, and the sole between bar and crust should be taken out before the heels are cut; but I have always been averse to too much rasping the outward part of the crust, particularly that on the inner side of the foot. Rasping at the toe I have ever encouraged, as nothing makes a foot flourish more.

I will not attempt to direct the preparing of diseased feet, as I have had but little to do with them, and the subject is above my hand. The bar shoe is very useful here; and indeed by no means a bad shoe for coach horses, with even good feet, at certain times of the year; but it is a horrible shoe to ride upon, as no horse can be sure with it.

I have reason to believe a vast number of falls on the road are occasioned by horses wearing their shoes too long. The points of wear should be consulted; and it should be borne in mind that some horses are much harder wearers, as the term is, than others. Light-bodied horses are less liable to have diseased feet than those which are heavy on their legs, and for reasons not merely in reference to their weight---they are generally less foul in their habit, and consequently less prone to inflammatory diseases.

A. You have said you consider a perfect foot a

sound foot. Be a little more explicit, and describe what you consider a good hunter's foot.

B. I confess my experience is all in favour of what may be called rather a strong foot, with smooth horn, and plenty of it, and heels rather high than otherwise; because it is much easier to lower them than to produce a contrary effect. I have always been apprehensive of sprained sinews in horses which have low heels, and they require very great precaution in shoeing, to ensure their standing sound. Large feet certainly are advantageous to a hunter in deep ground; but, if out of proportion to the animal's size, are very apt to injure his action and make him tire, in addition to being slow. Lord Jersey's Cecil (a hunter) was an exception here. He appeared far from being a well-bred one; but his excellence in dirt was attributed to his very large feet. He was, however, if I mistake not, remarkably clear-winded for a cock-tail. Snow-shoes enable the Laplanders to travel better in snow, but their natural agility and action must be destroyed by them.

There is no system in shoeing; the great art is to consult the natural tread, and, as Mr. Goodwin says, that shoe is the most entitled to our notice which gives the least inconvenience to the horse, and allows of the most natural position to the feet, either when in action or at rest. "When feet are shod," says this clear and comprehensive writer, "the weight and bearings of the animal are totally different, and unlike the condition of feet without shoes; for more labour is required of those parts

which have more weight imposed on them, and consequently less when weight has been removed. And when we compel particular parts to bear more weight than they are required to sustain in a state of nature, we equally dispose them to disease, as when we remove from other parts that weight which they were intended by Nature to support. Hence the importance of strictly scrutinizing the principles and properties of the different kinds of shoes, to ascertain which are calculated to produce the least mischief to the feet, and therefore most entitled to general adoption."

In shoeing a hunter, other things are to be considered exclusively of the mere fitting on the shoe:—first, its security; secondly, its ground surface; and thirdly, its reference to the safety of the rider, by obviating the chances of over-reaching and cutting.

"The convexities and concavities of the hoof," says Mr. Goodwin, "give rise to a form admirably calculated to embrace the ground with a firm and secure grasp; the projecting parts penetrate the earth, while the hollow parts of the hoof admit the earth to fill up their cavities, and to form as it were a kind of dovetail." Thus, then, it appears, that the nearer we follow Nature here, the more likely we shall be to ride securely over a country, for the angular rim of the hoof alone is a great safeguard against slipping. Thus a horse ridden in plates is safer in his turns on a race course than one ridden in shoes, because he obtains, what is called, a better foot-hold in the ground with the one than with the other. The rim of the common

English shoe, however, has not, till very lately, been deemed sufficient security for the fore shoes of a hunter, and never for the hinder ones---a turn up, or catch, having been always used to the latter.

I have spoken before of the evils supposed to arise from the use of the catch on the fore shoe, as distorting the tread of the horse; and quoted the authority of an old master of fox-hounds in confirmation of the evils alluded to. Nevertheless, in some countries---those which are hilly for instance, and where chalk forms part of the soil---something more than the plain surface of the shoe is absolutely wanting, or horses are apt *to spread**, as the term is, and become lame. The shoe best calculated of any I have met with to obviate the necessity of the catch, and keep horses from slipping, is the cast-iron shoe of Mr. Goodwin, of which I here subjoin a sketch.

It is called the concave-seated shoe, which, as far as the foot-surface is concerned, is by much the

* By spreading, is meant the feet slipping outwards, or laterally under the body.

best calculated for general use; and a mere view of the ground-surface is sufficient to convince us, that, from its concavities and convexities united, it must take good hold of the ground. The nails also are pitched outwards, which add to the security of it on the hoof.

With respect to these shoes preventing slipping, I can speak from very sufficient proof. I had ridden in them one day in Warwickshire, after a very wet night, and it so happened that we galloped down a sloping meadow, where I observed the horses slipped exceedingly, but that the one I was riding slipped very little. Determined the next morning to make myself better acquainted with the fact, I rode to survey this meadow, and soon traced the footsteps of my own horse, and satisfied myself of the firmness with which he had trodden. I should in fairness observe, he was newly shod, which might add *something* to the virtue of the shoes; but this is by no means essential.

I confess I admire the principle of the concave surface of shoes, whether for the field or road; and if the epithet *pretty* can be applied to a horse-shoe, it may be justly so to the one of which a sketch is here given.

In spite of some cavils that have been raised against cast-iron shoes---merely, I believe, because of their novelty---I wish never to ride on any other. I have had a pretty fair trial of them, and have never found one of them break or get at all out of place: and as to the endurance, or wear, I consider it to be as nearly as possible equal with the

common shoe. Objections have been started against them, inasmuch as in feet which require frequent shoeing, and do not secrete horn quickly, the nail-holes will occur at the same spot; but I cannot say I ever found this inconvenience. It must be a bad hoof that will not give fresh hold to nails in the course of three weeks, or a month; and the latter time, between shoeing, should always, if possible, be given to feet of this description.

Mr. Hinds speaks of the rigidity of cast-iron being at entire variance with all our notions and experience of elastic hoof. It may be so; but how much so is wrought-iron?

I am happy to say I have never experienced any difficulty in the use of Goodwin's shoes. They are to be had in sizes from No. 1 to 24—from the smallest pony to the largest dray-horse. Should they not fit, there is no difficulty in altering them; the country-smith has nothing to do but to make them of what is called blood-red heat (avoiding the white, or welding heat); and when he has made them wider or narrower as occasion may require, he should throw them on the ground to cool, not put them into water. In price, they are full as cheap as the wrought shoe.

I have been as yet speaking of the cast-iron shoes for hunting. I have never used them exclusively on the road, and merely, I believe, because our hacks are so apt to be shod in different parts of the country. I have seen Mr. Goodwin's cast-iron road shoe. It is not seated on the foot-surface, but is flat; it has a curve at the toe to prevent tripping in horses that are prone to that

habit; and has altogether a very comfortable and easy appearance as to the seat for the crust and heels, and I always think the more points support the better.

On the curve at the toe, or the French adjusture of the shoe, as it is termed, and which is something new to us Englishmen, Mr. Goodwin writes thus:—"On adverting to the advantages at the curve at the toe, I have to observe, that if the forelegs in action were lifted up in a perpendicular line without any bend or motion in the joints, the adjusture would be useless; but I still remain of the same opinion, that the bend in the shoe of the toe facilitates the flexion of the knee, fetlock, and coronet joints, and assists materially in rendering the action of the horse more natural. It has been asserted, that such a form of shoe is contrary to the natural state; but if investigation be made among horses whose feet have never been shod, as we find in many parts of Prussia, we shall observe them worn very similar to the shape of an old shoe."

Gentlemen who have studs will do well to endeavour to have their hunters shod by *one* servant belonging to the forge he may send them to, and by no means forget to give him three or four half crowns in the course of the year to drink success to fox-hunting. No man can shoe a horse well, unless he bestows time and pains upon him; both of which, I know by experience, are to be purchased at the price I have mentioned; but, otherwise, they will too often be wanting. I repeat, *no horse can be shod well, if shod in a hurry.*

If the ablest mechanic were to attempt to

remedy the irregular movement of a watch, whilst he remained ignorant of the structure and manner of acting of some of the principal springs, he would be certain to do more harm than good. Thus then does it appear somewhat miraculous that injury from nailing does not oftener occur, considering it is trusted to those who are almost---indeed we may say entirely---ignorant of the internal structure of the parts on which they operate. "Nailing," says Mr. Hinds, "is a very important operation, and requires much previous study of the formation and functions of the internal sensible parts of the foot:" but whence is this knowledge derived? or to how many of those thousands of apprentice boys who are daily employed in this apparently nice operation is it imparted?

With hunters, however, nailing is of very great importance---first, as to security of the shoe; and secondly, because it is necessary so often to remove the shoes of hunters, that, if nailing be clumsily performed, or the nails made of bad iron that splits in driving, great injury is occasioned to the crust, which requires a long time to remedy. The counter-sink head is a very great improvement; because it then seldom gets struck off by the force with which it comes against the ground; and we have this advantage in Goodwin's cast-iron shoes.

Any gentleman may satisfy himself of the good or bad quality of the nails his blacksmith uses. If they will not bear crooking three or four times with the hammer without breaking, he may be assured they are made of bad iron, and will most likely split in driving. I have also been very par-

ticular about the clinching of hunters' shoes. I never suffer them to be rasped off with the hoof, but have the point hammered back into the foot, as you would clinch the lid of a deal box, or a rivet.

There are also other improvements in modern shoeing. The nail is now driven more outwards than formerly; so that the point comes out but a small distance above the rim of the shoe. Here is security from pricking, and a firmer hold to the nail. The number of nail-holes also are reduced to seven, instead of eight, as formerly, leaving out the one next to the inside heel. This allows motion of the quarters and heels when the horse is in action. Mr. Goodwin does not recommend carrying the nails all round the foot, but prefers leaving a solid place at the toe, which is the principal point of wear. Mr. Goodwin's chapters on *Fullering*, *Punching*, *Frosting*, and *Nailing*, are vastly worth the perusal of all gentlemen who are anxious to preserve the feet of their horses; and indeed his book throughout is highly interesting, not only as giving the result of very extensive practice, but as conveying the meaning of the author in language that cannot be misunderstood. He has made the foot his study, and I really think he has made himself master of his subject.

Having boldly asserted that I do not consider shoeing by any means the general and proximate cause of foot-lameness, but having attributed it to several other causes quite independent of shoeing, it remains for me to state in what way my experience has directed me to endeavour, not only to

find the remedy for, but to prevent it. Let me however, before I begin, *repeat* the following sentence of Mr. Hinds:---"Time, and hard work, and the heat of the blood, occasion brittle hoof, and distortions, with numerous disorders that attach to the hoof generally, or belong to the sole only." It hereby appears that if I am wrong I am not the only one in error.

I have already said, that every good run a horse is ridden with hounds---every time a horse is driven ten miles an hour in a coach---so many times does that horse sustain what is called temporary fever. Now, as fever is the consequence of inflammation; as inflammation is the consequence of fever; and as we know there is a strong natural disposition to a determination of these inflammatory symptoms to the fore feet of horses, there cannot exist a doubt but there would be a vast number of horses lamed from severe work and high keep, even if they were to be ridden or driven without shoes, and if the ground they trod on were lined with materials as springy and elastic as the Vicar of Harrow's *velvet cushion.*

I do not think that, on reflection, we can be at all surprised that such is the case. "The great heat of his (the horse's) blood," says Hinds, "combined with his bulk, and the amazing exertions he is compelled to make, altogether predispose him to incur fever of the whole system, or inflammation of particular parts, according to concurring circumstances."

Having stated my conviction that much the greater number of horses are lamed from excite-

ment of the general system, it now remains for me to say what measures should be adopted to counteract this predisposing cause. *Nothing but the balling-iron and the auxiliary of good grooming will do it!* but the balling-iron and the auxiliary of good grooming will do it. The longer I have to do with horses, the more am I convinced that it is to foulness of habit the lameness and blindness of one half that are lame and blind are to be attributed. Consider, first how they live, and then how they work! One is as contrary to nature as the other; and as we cannot expect the domesticated horse to do what we require of him in these rapacious days, unless we have recourse to art, we must also have recourse to art to keep him free from disease. Even when constantly stabled, this is as much as we ought to expect: but when subject to the alternations of climate, and changes from hot stables to green fields, and from green fields to hot stables; from good hay and corn to sour grass, and from sour grass to good hay and corn; the difficulty is still increased.

A. Then you think that disposition to disease, and particularly to those of the feet, may be met by corrective and repellant medicines? Would you then dose your horse with physic after every severe day's work?

B. Here I cannot do better than quote Mr. Hinds once more. "*How much longer*," says he, "*is the horse to be treated with nothing else but violence?*" No; I would not physic him after every severe run; but I would give him something to check the increased circulation occasioned by

that run, and restore it as quickly as possible to the standard of health. When the blood is brought into a feverish state, local inflammation is so frequently gendered, that we ought to be constantly on the guard against it. As is the case with men, some horses are of a more irritable habit of body than others, and consequently more easily excited; but an alterative ball can *never* be ill applied after work. I am quite certain that thousands of horses are annually ruined from want of the precaution I am speaking of*.

Horses not fit to go---by this I mean horses grazed in the field in the summer, and brought to the covert's side in November, and all others short of work, and otherwise ill-groomed---are continually in danger of inflammatory attacks, particularly after a run with hounds. That inflammation thus produced has a determination to the fore feet, no man who has kept hunters will deny. But the feet alone do not suffer; the legs come in for their share---not, however, without increasing the liability of injury to the feet. After every day's severe work, inflammation more or less attends the flexor tendon of the leg, conducting that inflammation to the sole, the shuttle-bone, and the hoof.

* In 1828, Peer, of Southampton, told me his coach horses were out of sorts; a good deal troubled with *the lick*; and several of them out of work, in consequence. I persuaded him to have a hundred of my alterative balls made up, and to give each of them one a week. He did so, and found no more of the lick. The reader will remember that there is camphor in them. Now the following description of the properties of camphor was given me by a M. D.:---"Camphor (said he) is at once an emollient, an anti-spasmodic, an anodyne, a febrifuge, and a sedative."

What is this, then, but fever in the feet? and what but contraction, pumiced soles, and irremediable lameness are the result?

Medicine, however, is not the only panacea here---rest is indispensable; and I cannot do better than quote Mr. Hinds on this subject, as his authority will go farther than my own:---"The sheath itself," says he, "is attached to the two pasterns, of which it thus becomes the tendon or support; whence the back sinew and its sheath, or flexor, together, obtain the plural --- *tendons.* Within the sheath is secreted a milky fluid, intended for lubricating the parts during the very great action to which they are liable in every effort of progression. As happens in all other secretions, this one sometimes fails to produce enough for the intended purpose, when the sinew and its sheath adhere together, or at least do not act with freedom; the consequence whereof is lameness in a greater or less degree, which may be temporary only, or become permanent, according to circumstances. If the dryness and adhesion be trivial, as happens after hard work and a night's rest (mind this, reader!), the horse, upon getting warm, loses the lameness this deficiency has occasioned, for the secretion has been thereby renewed, and the lubrication is now supplied in sufficient quantity: but the horse falls lame again next day probably; and if he cannot be allowed *rest*, it is seven to one that he becomes permanently lame." Again, Mr. Hinds tells us, with a good deal of humour, that the favorite panacea of the French veterinarians is, "*take off the shoe and pare the foot.*" This is to

say, you *must* then give the animal rest, and rest will do what we cannot. This is their practice in all cases of strain; "for," adds Mr. Hinds, "the *marechallerie* were ill able to retain their sick horses in quarters upon urgent occasions of active service, *unless they could demonstrate the fact upon the view to their superiors.* And here," continues Mr. H. (farther on in the page), "I will candidly allow, at setting out, that our neighbours took a correct view of the *general cause* of all lameness. Those strains which occasion inflammation of ligaments, tendons, and muscles, always communicate *fever to the foot*, whence arise thrush, canker, sand-crack, &c. &c."

Now as it is impossible to separate the leg from the foot, is it not evident that injury to the one, by over-exertion or strain, produces lameness in the other? and the quotations I have here availed myself of prove, that it is economy in a man who hunts regularly to have an extra horse or two in his stud. It is the calling on them too soon before absorption has taken place---before excitement has subsided---that ruins half our hunters before they have served half their time, by crippling them in their legs and feet; and this is of necessity still oftener the fate of coach horses. If hunters past their eighth year were to be shewn out of the stable on stones, as the dealers shew their young horses, and no whip to alarm them was made use of, not one in three would shew sound. Shoeing, however, has very little to do with it.

"Let a horse," says Hinds, "have a loose stall

after any stage of strain, or disorder of the limbs; look after his evacuations, and cause them to be regular---a simple fever (or inflammation) of the foot depending very often upon nothing more than one or other of these being stopped, which affects the whole animal system sometimes, to say nothing of a single limb."

A. If you fail to convince others, you certainly have convinced me that general inflammation of the vascular system of the horse is the principal cause of foot lameness:—that poor horses, which travel slowly and live low, however ill they may be shod, are never lame in their feet; but that highly-fed horses, when ridden hard, would be equally liable to be lame in their feet if not shod at all, and ridden in very soft ground:---that *concussion* cannot be the proximate cause, the hind foot giving evidence that cannot easily be confuted---besides, have we not authority from the fountain head for saying, that the feet of horses which have high action are preserved good, *owing to the pressure they sustain from that high action?* Do then, therefore, conclude the subject, by telling me how I should treat my horses so as to stand the best chance of avoiding the ill effects of this general inflammation?

B. With coach, post, and road horses, little more can be done for them. There is no time to physic them; they cannot be allowed sufficient rest for Nature to come effectively to their aid, and vast numbers of them must remain lame. But with hunters, I am decidedly of opinion that a better method of grooming will in time alleviate

all kinds of lameness, though it cannot remove it, and especially that of the feet. The regular in-door system, insuring superior condition, and consequently less exhaustion after work, will do much towards preserving horses sound; and in addition to this, the march of intellect is making its way among hunting grooms. Few of them have yet arrived at any knowledge of the pulse; but they consult prognostics more than they were wont to do, and the best results will be derived from their increased circumspection.

"Costiveness," says Mr. Hinds, "may be considered an original disease, and as one producing, as well as being produced by, fever." How often, however, have I gone into hunting stables, and seen horses shewing the greatest difficulty in emptying their bowels of hard and very dark-coloured pellets, and yet pronounced by their *grooms* to be "fit to go to hounds to-morrow!" At other times I have seen horses labouring under evident suppression of urine, but still said to be quite well and right! Let a veterinary surgeon, however, put his hand on the pulse of those horses, or let an unscienced man of only common observation put his hand into such horses' mouths, and either of them will tell a very different story. Dung and urine are the best indications of the general state of the body; and unless, as I have said before, a groom looks attentively at, and watches these, he is never sure of his horses.

A. Has it been your practice to attend to these particulars in your own stable?

B. Undoubtedly it has. The first thing I do

on entering my stable is to look to the state of each horse's bowels: if I see them constipated, I order a loose bran mash, or a light dose of physic, as circumstances may require: if I see foulness or difficulty in the urinary discharge, a mild alterative is given: and I would never suffer a hunter to go more than six weeks without a light dose of physic. Without it, functional derangement, visceral obstructions, will take place; and the words, "*keep the primæ viæ free*," should be written over every stable door. The kidneys also will get inactive, and they demand no less attention.

A. Notwithstanding all this, you have given us a catalogue of inflammatory cases in your stable as well as in that of your neighbours.

B. I have; but I consider it very small, and I have already told you that most of them occurred when I was absent from my stud. Had all my casualties ended in death, they would not have exceeded the misfortunes of many tip-top stables I could name *in the course of one year.*

A. Have you been very particular about ventilation?

B. Of late years I have: but for the first six of my keeping hunters I thought little about it; and it so happened that during that period I had no case of inflammation in a stud of from six to eight horses; neither do I recollect one of foot lameness: but, as my late much lamented neighbour was wont to tell me, "*I was always a devil of a fellow for physic.*" White's first publication---which I remember I studied hard, but which my old groom thought

lightly of, saying, whenever I chanced to quote *him*, "Oh, Sir, you must not mind him; he is one of those soldier-gentlemen; he knows nothing of *hunters!*"---gave me the first insight to the benefits of free circulation of air in a stable, on which *I now set very great store.* In short, let the prophylactic art be practised how it may, horses are never safe when breathing contaminated air; and a good circulation of the vital principle is by no means incompatible with a warm and comfortable temperature---up to 63°.

A. Then I am to conclude, that in keeping horses very clean *internally*---their being constantly subject to some cooling regimen after severe work---great attention to their feet in summer and winter---and regular attention to the state of their secretions—chiefly depend the healthy state, not only of the whole system, but of their feet in particular?

B. That is undoubtedly my opinion. From the high state of excitement in which horses that are subject to constant and fast work are kept, we can never expect to remove "the curse upon good horse-flesh" *entirely;* but it is by the means I have pointed out—assisted with the best shoeing we can get---that we are most likely to palliate and diminish its direful effects. Let us, however, take this into the account:---some horses are by nature so robust that they resist all kinds of disease; some so delicate that nothing we can do for them will enable them to do well; some very prone to inflammatory complaints; and others, whose feet are made of soft and half-organized materials, will never stand quick work on the road beyond a very limited

period of their lives. Climate, and treatment during colthood, have a good deal of influence here.

There is one other great error in grooming which I particularly wish to notice. A severe day's work often leaves a distressing languor about a horse, which food will not remove. Having gently operated upon the bowels, a regular course of tonic medicines is here the only sovereign remedy, but it is very seldom thought of. I have before alluded to the pre-eminent benefits of tonics in the stable.

The hot mouth, the dull eye, with inflamed eyelid, in the horse, which has been excited by high food and hard work, bear a strict analogy to the foul tongue, the feverish skin, the blood-shot eye, and flushed face (after dinner) of the man who has lived too well, and, in the language of the stable, become foul. This reminds me of an anecdote of a certain Chaplain to a regiment who was always the last to leave the mess-room. Nature at length cried "*enough*," and his Reverence called on a Scotch physician of great eminence to see what he could do for him, and began to describe his malady. "Stop, Sir," said the Doctor, "I know what is the matter with you *better than you do yourself*. You have *twenty years' dirt in you*, which I shall endeavour to get out of you." This was precisely the case with the Parson. He had a fine constitution; and had he been regularly cleaned out, as horses highly excited absolutely require to be, his life (prematurely cut off) might have been spared to a good old age.

With the exception of sudden cold, or chill, I am quite convinced that all inflammatory complaints

in horses proceed from three causes only, independently of epizootic contagion---viz., breathing foul air, over-excitement of the vascular system by high food and work, and want of attention to the natural secretions, among which I include sweating. Thus, the head is as likely to be injured as the foot, and the foot as the head; for *the whole mass of blood* is brought into a feverish state. Now we cannot always be physicking (for strong and stimulating purgatives often induce rather than check these evils), so my favorite system of alteratives must be had recourse to. "The opposition of a few," says Mr. Hinds (speaking of alteratives), "is no obstacle to this commendation of an obscure but safe and certain class of medicines;" and, as far as my experience has gone, I am free to admit that in hunters' stable I have been more indebted to alterative medicines than to that universal catholicon, *physic;* which, though at times it is indispensable, has ruined, blinded, and destroyed thousands upon thousands of good horses!

I am not aware that I have anything to add to this part of my subject, which, with the others I have treated of, I shall now bring to a close. I make no doubt but I shall be severely commented upon for presuming to offer an opinion, so directly in opposition to the highest authority, on the comparative harmlessness of iron horse shoes; but my experience fully justifies every word I have said. That iron shoes improperly applied alter the form of feet, and are *one* of the many causes of foot lameness, I should be a blockhead to deny; but for *once* that the cause is to be traced to them, it is to be traced

fifty times to other sources. Theory, I admit, points the finger straight to the shoe: practice and experience *of all kinds of horses, and all kinds of work to which they are applied*, as clearly direct us to the whole vascular system and it all ends in this:---Keep your horses poor; use them gently; shoe them ill, or shoe them well; and they will be sound in their feet *without either physic or care*. Feed your horses highly; ride or drive them hard; shoe them as well as they can be shod; and one fourth part of them will sooner or later be lame in their feet, *with physic and care*.

LAMPAS.

I have before said that human nature often blushes for some of her errors; and so indeed she ought. Is it possible that it was ever contemplated by Him who formed the animal, that an unbroken colt should be submitted to the exquisite torture of a red hot iron tearing away the palate of his mouth? I cannot believe it; and in only one instance did I ever suffer the villanous operation to be performed on a horse of my own. My regard for the noble animal induces me to present to my readers the following admirable extract from Mr. William Percivall's Lecture on the Diseases of the Mouth of the Horse:---"The Lampas is a name given by writers on farriery to a swelling or an unnatural prominence of some of the lowermost ridges or bars of the palate. I should not have thought it worth while to have taken up time with this supposed malady, but that it has called forth the inflic-

tion of great torture on the animal by way of remedy, and that it has been a cloak for the practice of much imposition on those who have been in the habit of consulting farriers on the diseases of their horses. I allude to the cruelty and barbarity of burning the palates of horses so affected. Equally consistent would it be---and were it consistent, more requisite---to cauterize the palates of children who are teething; for the truth is, that the palate has no more to do with the existing disease (if disease it can be called) than the tail has. Lampas is neither more nor less than a turgidity of the vessels of the palate, consequent upon that inflammatory condition of the gums which now and then attends the teething process; but, notwithstanding this plain and simple truth, the animal (and I believe this is owing to its not having been explained before) continues to be persecuted for it, even by some *professional* men, as well as farriers, up to this hour. The practice is a stigma upon our national character, and a disgrace to the professors of veterinary science.

"Teething in children, indeed, is now and then a season of restlessness and pain, and was one---before surgeons were in the habit of using the gum lancet---of anxiety and danger; but it is not so with horses: they never have any feverish irritation created in the system, though they have some tenderness of the gums and palate, and though some few, in consequence of this tenderness, *cud* their food, or refuse to eat any but what is soft and unirritating. In such a case, if anything requires to be done, we ought to lance the gums, not the palate;

but I do not remember ever to have had occasion to do this but once." Mr. P. then states a case wherein the life of a horse was endangered by his inability to masticate his food; when, on a minute examination, two little tumors, red and hard, were discovered in the situation of the posterior tusks, which, when pressed, appeared to give the animal insufferable pain. On lancing them down to the teeth the evil was removed, and the horse very soon restored to his usual good health. I sincerely hope this circumstance will be deeply impressed on all owners of studs.

LEGS (BIG).

What is termed a big leg, is generally the result of swelling taking place in the sheath of tendons after violent strains, and those, perhaps, not properly treated; also from blows, where the parts become lined by a thick coat of lymph; also from a deposition of morbid fluid in the cells of bones. The bones themselves, indeed, sometimes become thick from external injuries---that is to say, the body of the bone is occasionally found thickened from a deposition of bony lamina over the original bone. Again, I read, that bones will sometimes lose their vitality, and the neighbouring vessels will take on the ossific action, and deposit a considerable quantity of new bone to supply its place.

So much for the theory of big legs. They are eye-sores, it is true; but thousands of good hunters and coach horses have them, and are as sound as when they were foaled. Indeed it is a rare circumstance to see an old hunter's legs quite free from

these callosities, although not so rare since the indoor system has been pursued in the summer months, as, by the help of rest and proper regimen, absorption takes place more freely.

Barring the effects of severe accidents, nothing more contributes to the general healthy state of a horse's legs than keeping him internally clean, and bandaging his legs with flannel after severe work, so as not only to determine the blood to the skin, but to increase the circulation of it throughout the limb. Warm water and a loose box are auxiliaries. The legs of many hunters, however, will get round, do what we will with them; but I would never take active measures with them unless lameness were the consequence. Bathing callous legs in cold salt water* is very strongly to be recommended. On this part of my subject I shall quote Osmer, whose sentiments so accord with my own, and with the result of my experience in guarding against the consequence of severe work:—"To remove the inflammation of the glands," says he, "and to prevent an induration and enlargement of the ligamentous parts, and the integuments of the fetlock joint—the consequence of repeated violence—it is a good custom for all sportsmen to cause the joints of a horse, after a day's hunting, to be well fomented with flannels dipped in warm water; and some warm flannel clothes or rollers should be moderately bound thereon for the ensuing night."

Before I dismiss this part of my subject I must observe, that in nothing do horses differ so much as in the nature, or rather quality, of their legs.

* Put two double handfuls of salt into a pail of cold water.

True it is, that perfect security against accidents is not consistent with the scheme of Nature: on the contrary, we may say, a certain insecurity is inseparable from the delicacy of all animal structure. Nevertheless, some horses are hard-ridden for several successive years, and yet their limbs remain uninjured. This can only be accounted for, I think, by the balance between the power of exertion, and the capability of resisting the shock that exertion produces, being pretty equally divided. For instance, a horse with a heavy man on his back must receive a severe shock in alighting from a high leap; but still, if the inert power of resisting that shock bear a relation to the muscular power with which he springs at it, he is not likely to receive injury from it*. I am not now going to enter into the mechanical structure of the animal, and thence to account for the vast difference we find in the legs of horses; but I have always preferred those in which the shank or cannon-bone is short, and *which are a long time in drying* after having been wetted with water. I also require a large grasp of flat, ropy sinews, not caring so much about the main size of the bone, as the material of the adjacent parts. Let me conclude this subject by observing, that good grooming and the balling-iron are great preservatives of legs: neither should good shoeing be overlooked; as the position of, and the bearing upon, the shoe has much to do with the health of the flexor muscles and tendons of the limbs.

* This is the case with a man. The elasticity of his limbs is always accommodated to his activity. Were it not so, half the Opera dancers would break down.

MOLTEN GREASE.

From all the nonsense that I met with early in life on the supposed disease called Molten Grease, I was inclined to think there was no such disorder. However, the number of horses I have seen killed from the effects of hard riding, when not in proper condition for it, has induced me to include it among the various symptoms attending violent general inflammation; and certainly more likely to be found in fat horses than lean ones. A good twenty minutes' burst over a deep country may kill the best horse in England, if fat in his inside; and then we may as well, or rather better, say, he died from his grease or fat being melted, as from our own stupidity or inhumanity in riding him with hounds when he is not fit to go.

NERVING,

Or *Neurotomy*, as Mr. Percivall classically designates it.---I never have had this operation performed on a horse of my own; but I am confident it will stand the test of ages. It is an act of mercy towards such horses as are in the hands of those whose circumstances *oblige* them to use them, although severely afflicted with lameness below the fetlock joint; and for slow work they answer all the purposes of naturally sound horses. For brood mares also which are in pain from their feet, it should always be resorted to, as it is a great point to enable them to carry their load comfortably when they become heavy in foal; and Mr. Percivall, in his

Elementary Lectures, mentions two instances of sterility having been removed by it. For hunters, or hacks, I cannot recommend it; for, as it evidently produces a kind of paralysis of the lower extremity of the limb, it cannot be expected that they can have that free use of it which ensures safety to the rider. I have, however, seen two hunters go very well after being nerved, one of them the property of Mr. Maxse. The operation was performed by Mr. Kuney, of Nottingham; but it failed in another of that gentleman's stud. I have seen coach horses in fast coaches go well enough when nerved; but their action is generally unnatural, and they are apt to break their legs on false, uneven ground.

To Mr. Sewell, of the Veterinary College, are we indebted for the now common practice of nerving for foot-lameness: and although Mr. Goodwin states a few cases wherein the loss of the foot, and consequently the horse, was the result; yet, on the other hand, he speaks of horses, of no use to the owner *before* the operation was performed, having continued at severe work after it for five years without any return of lameness: "and," adds he, "I see no reason why they may not be as effective as they now are for many years to come."

The following remark of Mr. Goodwin on this very interesting subject is well worthy of notice:—"It has been stated that the hoof and foot waste after the operation; but I am glad to know that this observation is imaginary. I have observed in hoofs where the operation has been performed a more plentiful production of horn than before, and a

greater disposition to grow in the natural form: and I think this is a consequence to be expected; as the irritable state of the foot being destroyed by the division of the nerve, the secretion of the horn is likely to go on more freely. When the operation has been performed *before* any considerable change of structure has taken place, I have no doubt that the original cause is removed altogether, by the animal being enabled to bear the full proportion of weight on the lame foot."

As these Letters may be read where this operation and its results are as yet but little known, I here give Mr. Goodwin's words in the description of it:—

"The operation itself is very simple. Having first ascertained the course of the artery by the pulsation, an incision is made through the skin about an inch and a half in length; and on removing the cellular substance (the skin), the artery, vein, and nerve are all shewn running together, the nerve on the inside of the artery, and close to it. A needle may be readily passed under it, leaving a thread, which, on pulling a little, enables the operator to separate the nerve from the artery with ease, and to take out as much as is considered necessary. The skin should then be closed with adhesive plaster, or a stitch, which sometimes heals by the first intention; after which bleeding and physic are useful. When it is performed below the fetlock joint there is less chance of the part operated on being struck by the opposite leg. It likewise leaves a small branch of the nerve undivided, which supplies the fore part of the foot;

so that sensation will not be wholly destroyed, though I find it best to divide the nerve above the joint on the outside of the leg."---It appears there are instances of sensation returning by the nerve uniting, when a second operation has been necessary, and has succeeded.

PHYSIC.

In my second letter on "Condition of Hunters," (*p.* 49,) I touched a little on this head, but promised to return to it at a future time, it being one of the greatest importance to all owners of horses. I am happy, however, to have it in my power to state, that, in consequence of the late general diffusion of veterinary science by the several works which have been published, the *modus operandi* is now so much better understood, that fewer accidents arise from the improvident use of immoderate cathartic medicines than when I first started in life, or when I commenced writing these Letters. When I look back, indeed, and reflect upon the copious doses of aloes, good or bad, which we were in the habit of administering, I cannot persuade myself that the intestines of our horses were not better lined than they are at present. I ought, however, to go back to a still earlier period, when fourteen or sixteen ounces of aloes, with other auxiliaries, composed what was called a mild dose of physic*!!

* On this subject I lately stumbled upon the following sage remark of some would-be critic on Professor Peall's (Professor and Lecturer to the Dublin Society) *Observations on the Diseases of Horses.* It is to be found in vol. xlix. of the *Sporting Magazine,* and

The method of administering physic to the horse, and his treatment in its operation, being now pretty generally understood, and, I have reason to believe, practised under the guidance of moderation and reason, I shall not dwell on it long; but the point on which it is most difficult to decide is, at what periods it is most advantageous to give it to horses in high condition. In cases of internal inflammation---to which, next to copious bloodletting, we know it to be the most powerful check—we do not stand in need of a guide. As an auxiliary to condition, it is acknowledged to be as essential as good hay and corn. But the secret consists in knowing when it should be given to preserve the condition it has so much contributed to establish; and it is certainly best understood in racing stables, where, amidst what we might be

must create surprise, that so lately as 1816 there could have been found a writer, *pledging his own experience for what he advanced*, that had the courage to obtrude such nonsensical, and, at the same time, dangerous doctrine on the notice of Englishmen. "In the mean time," he says, "he (Professor Peall) is, or appears to be, a sharer in that timidity which practitioners have *affected* (mark this word) of late years, with respect to the quantity of fine aloes to be prescribed as a dose for a horse; prescribing ten drachms as a strong and one ounce and a half as a *very* strong dose for a large carriage or cart horse. Now we pledge ourselves, on the sure ground of experience, and of having purged horses of every description, from the racer to the cart horse, that ten drachms of fine aloes is an ordinary and mild dose for saddle horses, generally insufficient in purgative efficiency for many; and that one ounce and a half administered to a cart horse would be about equal in point of effect to currying his hide with a lady's flesh-brush." An eminent Veterinary Surgeon at this time gives a dose of one ounce and a half of Barbadoes aloes; and a well-known Professor testified in Court, that one ounce and a half to three ounces of the best aloes might be given to a horse in one dose!

induced to term *the excesses of physic and sweating*, the ultra of condition is to be seen.

The theory of purgation is a subject which it will not be expected I should enter upon at any length. Suffice it to say, that the two principal objects are, to unload the bowels of matter that is of no farther service to the body, and therefore only an incumbrance to it; and to excite a determination of blood to the internal surface of the intestinal canal, in order that some of it may be evacuated in the form of secretion. Thirdly, cathartics increase the influx of the biliary and pancreatic secretions, and therefore promote health by their influence on the digestive organs.

I was much pleased with one of those pithy hints which Mr. Abernethy gave his pupils at a late lecture. "*Gentle* medicines," said he, "bring about the secretions; I do not like *to bully the organs into health*." This exactly accords with my ideas of the effects of physic on horses. I am quite certain that a gentle purgative should be given to every horse full of hard meat once in six weeks throughout the year, exclusively of somewhat stronger physic at particular seasons, such as before and after work, and the consequent changes in quantity and quality of food. The febrile heat, occasioned by the severe work we give them, causes a deficiency in that mucus (as every observant groom must be aware of, whenever he sets fair his horses' bed) which facilitates the passage of the food, and which deficiency of course produces costiveness, and all its dangerous consequences. I am quite sure that not only is this treatment bene-

ficial to general condition, but a mean of warding off those inflammatory attacks to which all horses, but particularly those who eat much corn, are so subject. When bowels are overloaded no animal is safe; for the coats of the intestines lose their proper tone, and a healthy secretion is denied them.

What I have now said is founded on my own practical observation, more deeply impressed on my mind by the several narrow escapes I have had of losing valuable horses from not paying attention to their bowels, when *apparently* in the best of health; but I am anxious that the reader should be furnished with still better authority; and shall therefore present to him the following passage from Mr. William Percivall's Lecture on Purgation and Purgative Medicines;---

"I shall next cursorily point out the healthy states, and some of the diseased or disordered conditions of body, in which we are in the habit of administering cathartic medicines: for purgatives are sometimes given in health, as preparatives, or auxiliaries to putting horses into condition; whereas they are never given in disease but to remove that which is the cause of the malady, or that which has more or less influence in its progress or continuance. The simplest view we can take of the exhibition of a dose of cathartic medicine is the expulsion of the fæcial contents of the large intestines in a shorter time than they otherwise would have been discharged. This is what is called "unloading the bowels;" and is the principal intention in purging horses that have been recently taken

up from grass. But it is scarcely possible thus to limit its operation; for every *laxative* that we administer must in some degree augment the intestinal secretions, if not the biliary and pancreatic as well, and thus *remotely* be productive of other consequences. When we improve the condition of a horse in apparent health by the administration of alteratives, or laxatives, or cathartics, we are said to accomplish it by urging the various organs employed in the digestive process to a more vigorous performance of their functions; but if all the melioration the animal's constitution has evidently experienced be duly estimated, this confined reasoning appears to be inadequate and unsatisfactory. There would seem to be disorder or derangement somewhere in the system in all these cases, the removal or rectification of which, either temporary or permanent, was the remote effect of the medicine, and that on which its salutary efficacy depended. How much do a few well-timed doses of laxative medicine contribute to restore the condition of a poor horse!---how influential soiling is in inducing a thriving diathesis, and promoting fatness and sleekness, and every other appearance of robust health!---and yet these meliorated states probably were not preceded by any *signs* whatever of disorder or disease! And it is in the alterative and laxative forms that cathartics are so beneficial in promoting health that appears to be flagging: in fact, they are effectually, under such circumstances, veritable tonics."

Again.---"There are certain *manifestly disordered* states of body also in which laxatives are

preferable to purgatives in full doses. In all cases of habitual pursiness or thickness of breath from previous organic disease, in broken wind, and in permanent roaring, in evident imperfection of the digestive process, and in some cutaneous affections, their judicious exhibition will often be found to be eminently serviceable."

As nothing that I can write can so satisfactorily account for the operations of properly-applied cathartics, or laxatives, as auxiliaries to the condition and the general safety of horses' health, I shall conclude this part of my subject by saying, that I never used any kind of oils as laxatives to promote condition; but have found great benefit in two drachms of Barbadoes aloes, with one drachm of ginger, made into a very small ball, and given (generally) two mornings in succession. All the experiments Mr. W. Percivall has made on oils, as cathartics in horses, have proved them uncertain, if not dangerous, in their operation.

RING-BONE.

It has three times happened to me to have horses lame without being able to ascertain the cause, and on sending them to veterinary surgeons for examination, the answer has two or three times been ---" incipient ring-bone." No ring-bone, however, appeared.

Horses with short unyielding pasterns, that have been worked on hard roads when young, are most subject to this disease---and a most formidable one it is: for nothing but the red-hot iron has any chance to contend with it, and even that will

not always do. A very small excrescence at the junction of the pastern with the coronary bone will sometimes produce violent lameness, and resist all remedies; whereas another as big as one's fist is comparatively harmless. In 1820 I gave a farmer in Worcestershire 80*l.* for a horse with a ring-bone as big as half a twopenny loaf. He had, in consequence, been sold for 15*l.*; and the veterinary surgeon who fired him (a person of great eminence in his profession) assured me he must ever be lame. After riding him a season, I sold him for 150*l.*, and he was never lame afterwards from that cause.

ROARING.

Here is one of the very deep curses on good horse-flesh, and nearly as destructive as foot-lameness. How many hundred---aye, I may say thousand---otherwise fresh, young, and sound horses have I seen afflicted with this disease, and therefore, in most cases, useless for fast work! I am happy to say, however, it has been my good fortune never to have had a horse turn roarer in my own stable, having entered it sound; and I only purchased two, which cured me of going to that market again. One nearly broke my neck at a fence, having entirely lost all his powers in the space of five fields; and the other I christened *The Bull*, for he could have been heard half a mile off if he got into deep ground. Notwithstanding this, I have seen two brilliant hunters that were roarers.

If any one wishes to become acquainted with this most insidious disease, he must read Mr.

William Percivall's Lecture on it (*p.* 242, vol. ii.), occupying about twenty pages. I wish my limits would allow of my transcribing it here, for it could not fail being highly interesting to every owner of horses. After denominating the different degrees of the complaint --- such as piping, wheezing, whistling, high blowing, and grunting---he enters upon what he terms the *ratio symptomatum*, or theory of roaring. "I may observe," he says, "that it bears an analogy to *croup*, both in relation to the proximate cause, and to the parts affected: but we must be on our guard not to carry this comparison too far, or it will lead us into serious pathological error; for, although I may broadly assert that the proximate cause of roaring is grounded on *cynanche trachealis*, the inflammation does not put on that type which makes croup so formidable and dreaded a malady in a human being; neither is it confined to the years of immaturity. When roaring does happen in colts, it generally exists as a mode of termination of strangles: the catarrhal affection that accompanies strangles now and then continues long after the wound in the throat is closed up; leaves the laryngeal membrane thickened, and perhaps ulcerated; and thus lays the foundation of this disease.

"But not only catarrhal affections, many that are considered as inflammation of the lungs terminate in roaring; for, in truth, the symptoms of this species of membranous inflammation are not, at all times, so diagnostically marked as to enable us to steer clear of this error: and what renders

cynanche trachealis infinitely more obscure and insidious in its attack and course is, that in the majority of cases inflammation is of that mild chronic type which is apt to escape the notice of those to whom we must look for the first reports of ill health: and hence it is, that we are continually meeting with so many roarers, in whom nothing is known about the inflammatory action to which they owe their present malady. Seeing then that *cynanche trachealis* is the common forerunner of roaring, and that upon our knowledge of the one must mainly depend our competency to treat the other, I shall here detail the symptoms by which its existence is indicated."

Mr. Percivall here describes the usual symptoms of violent cold and cough, with its ordinary concomitant---fever; and concludes thus:---"In some cases, when the inflammation is at its height, spasms of the larynx come on; during the continuance of which respiration is carried on with so much distress that the animal is, every now and then, threatened with suffocation; or the breathing may become more embarrassed from a thickening of the membrane which lines the glottis. Did the disease," continues Mr. P. "commonly manifest itself in this acute form, there would be no room for doubt as to the nature and tendency of the case; but, as I observed before, it approaches and creeps on in that insidious way, that the foundation of roaring is actually laid before it is discovered that the proximate cause---inflammation---has been present in the air passages: at least so it is with the generality of cases."

The causes of *cynanche*, Mr. Percivall tells us, are similar to those which give rise to what we call common colds and pulmonary affections in general; but that it sometimes proves to be an extension or a sequel of the former, and a precursor of the latter. Mechanical injury, however, frequently produces roaring; and especially that occasioned by horses standing for many hours in the day on the bearing rein, by which their larynges are compressed, and tracheæ distorted, to an extent nature never intended they should be. On this part of the subject Mr. Percivall writes thus:—"It may be remarked here (speaking of mechanical injury being a proximate or exciting cause of roaring), that simple flexion of the pipe itself, from the forcible and continued incurvation of the nose towards the chest, has been known to produce roaring. Mr. William Goodwin, Veterinary Surgeon to His Majesty, informed me, that, during his professional avocations at St. Petersburgh, his attention was repeatedly drawn to several horses, who by himself and others had been declared to be roarers, in consequence of their having got rid of the complaint in the *manège*. These horses, it appears to me, roared from unnatural flexure of the windpipe; and this distortion, the Russian system of equitation, which consisted in the continual elevation of the head and projection of the nose, was well adapted to counteract, and in process of time remove. The inconvenience, at first, is only temporary; the intervals of relaxation give the parts an opportunity, for a time, of recovering their wonted tone and shape; but repeated and long-continued acts of such violence may so

enfeeble their elastic powers, that permanent deformity of the larynx or pipe may result, and the malady may become an irremediable one." Now, having the pleasure of Mr. William Goodwin's acquaintance, he has not only made me acquainted with several of the facts here alluded to by Mr. Percivall, but shewed me a very curious specimen of a diseased larynx, produced entirely from pressure. When on the subject of mechanical injury to this highly-sensible part, it may not be amiss to state, that Mr. Sewell strongly censures the practice of buckling neck straps, or the throat-latches of collars and bridles, tightly; but my experience cannot produce me any ill consequences from this practice, which I have seen carried to a very considerable and, I dare say, unwarrantable extent with crib-biters, and horses which are given to rid themselves of their collars in the night.

Now it will not be expected that I am to follow Mr. Percivall into all the causes and degrees of roaring which he produces, and which he so ably expounds; but if I had never read his lecture on the subject, and been asked what I conceived to be the most prevalent causes of this so very common disease, I should have answered nearly in these words:---I am inclined to think that wherever there has been considerable inflammation in parts of such delicate structure as those which become the seat of this dicase, although that inflammation may terminate in resolution, yet it will generally leave behind it some remains, which an experienced anatomist would detect. Effusion we are convinced has taken place; and, in most cases, we

may naturally suppose, that in proportion to the quantity of this effusion, which still remains unabsorbed by the constitution, will the degree of roaring be determined*. Thus severe colds (or indeed inflammation of the lungs†) which produce much membranous inflammation are doubtless the most common causes of roaring; and therefore should be as much as possible guarded against: nor should we ever lose sight of the well-known fact, that constitutions of horses vary exceedingly; and that, like human beings, some of them are not only more delicate than others, but particularly irritable about the throat and chest. "Such animals," says Mr. Hinds, "should be exposed as little as possible to any violent weather, or sudden change of temperature. These are the kind of animals that benefit greatly, or suffer the most, by a summer's run at grass, according to the heat, the dampness, or dryness of the season, and the precautions used previously to, and at, the turning out." On this subject Mr. Hinds writes thus, and I think with great propriety:—"A simple cold consists in

* "The most common effect of inflammation of the air passages," says Mr. Percivall, "is a thickening of the living membrane; which if it happen in that part of it that lines the chambers of the nose, will give rise to that thickness and pursiness in the breath in which consists the complaint of the high-blower. But the part where this increment offers the most impediment, and consequently the greatest inconvenience, is the glottis, the fissure of which is very sensibly diminished by the morbid thickness of its lining; and thus is produced roaring, or *confirmed* roaring; or, if the opening be much contracted, whistling."

† Mr. Percivall produces one instance (a rare one he acknowledges) of the lungs being the seat of roaring. There was no disease of the larynx or trachea, so that bronchotomy was tried, but without effect.

slight inflammation of the membrane that lines the nose, windpipe, &c.; as we find, in all other inflammatory disorders, variations in the symptoms occur, according to the previous constitution of the individual, and its previous condition. For example: if two equal animals be exposed to a chilly night air, that horse which had performed a journey previously to turning out would catch a cold for certain---the other most probably would escape; but if both had performed the same journey, let us suppose, and one of them laboured under the constitutional defect of adhesion of the pleura, he would acquire the more malignant cold, known as inflammation of the lungs---his less unhappy mate, a simple cold. In proportion that the attack may be more severe, the symptoms increase, as does the danger. Passing the hand down over the windpipe at the epiglottis, the animal will shrink; he will soon evince difficulty of swallowing, and refuse his food; *inflammation has begun!*"

I think most people are in error as to the terms for the various degrees of roaring. It is very common to hear a person say "my horse is a bit of a whistler," when he means to imply he is not an absolute roarer. Now whistling is the *ne plus ultra* of roaring. Mr. Percivall details the result of an experiment he made on an ass, to ascertain the degree of restriction necessary to produce roaring. He passed a ligature of broad tape around the animal's windpipe, about one-third of the way down the neck. "The tape," says he, "was first drawn with moderate tightness, and the animal roared when made to trot; the pipe was then compressed

to about half its natural calibre, and the animal whistled."

It is quite evident there is no cure for roaring. "Some of my professional contemporaries," says Mr. P., "have contended hard for celebrity with the obstacles that are encountered in this alluring field for experimental research; but they would have spared themselves much labour if they had (and it is generally the nearest road to cure after all) directed their investigation vigilantly, but patiently, to the *cause* instead of the removal of the disease. Which of them, I should like to know, can attenuate a thickened and indurated membrane? or which of them can remove an organized band which crosses the passage? In a word, which of them can proceed *secundum artem* to cure a disease of the nature of which he, by his own confession or silence, is either doubtful or ignorant?" No; if I may be allowed to speak after such authority as this, I should say, that all we have to do is to take every means in our power to combat inflammation, and so get rid of predisposing causes. An operation called bronchotomy, which consists of an opening into the larynx or trachea, was much in fashion some years ago, in consequence of once proving successful in cutting out one of those bands of lymph which cross the windpipe; but it soon got into discredit from the great uncertainty attending it. I once saw it performed upon a horse in London, to which instantaneous relief, from great distress in breathing, was required, and it certainly had the desired effect; but I did not hear the result.

I am always pleased to see the disgusting quackery, and, what is worse, the bare-faced imposition of ignorant farriers of the Old School arrayed in their proper colours. "Clater," (the author of *Every Man his own Farrier*, which has just gone through the twenty-fourth edition!) says Mr. Percivall, "presents us with a very innocent recipe for the dispersion of these trifles---a few *aniseeds* and *caraway* seeds, and a little '*Dover's powder* mixed with the yolk of an egg." On coupling this with the assertion of a certain veterinary writer, which from his professional reputation must, I think, have been made without consideration, Mr. Percivall thus energetically expresses himself:---"I need not expatiate on such statements; I trust I have said enough to expose the baseless fabrication of them, and to convince scientific practitioners of the necessity of investigating causes before they proceed to unravel or remove effects."

I am also not a little delighted to find on such very high authority as Mr. Percivall, that turning out hunters in the summer is one of the predisposing causes of this irremediable complaint. "*Two undomesticated horses*," says he, "*out of three*, under five years old, that are taken from cold situations and kept in warm stables, and fed upon the ordinary ration of provender, will receive catarrh. But even domesticated horses that are advanced in years, and that have been accustomed to such changes, do not always escape unless some precautionary measures be taken; for hunters taken up from grass in August or September, unless due

attention be paid to the temperature of the stable, and their clothing and regimen, are often the subjects of catarrhal attacks." Let such as persist in grazing their hunters note this remark*, and reflect upon the annual loss to which they subject themselves; for I am quite certain half the roarers we have are made so by the in-and-out system. Recent cough becomes chronic cough; and chronic cough ends in roaring: for, let us recollect, chronic cough is often the remains of an ill-cured cold, *though no cough may have attended it in its first stage.*

ROWELS.

My experience has been anything but favorable to rowels. As a counter-irritant, they are too tardy in their operation to be of much use in inflammatory complaints---on the contrary, they must, for a time, increase fever. Farmers and stage wagon proprietors were much in the habit of inserting rowels in their horses; but even with them the practice is on the decline. In cases of great grossness of habit, such as big legs, &c. they may be useful, when circumstances will not admit of time and rest to put other remedies to the test. Their chief use appears to be in counteracting the unfavorable termination to inflammatory complaints.

* I lately remarked to a medical gentleman who rode past my house on a very neat hack—"You have a good-shaped one there," said I, "with the right sort of shoulders and hind legs for the road." —"I have so," said the Doctor; "but he is ruined. I turned him out, and he came up a roarer! Doctors ought to be better judges; for in these cases *sero medicina paratur!*"

TEETH.

Such of my readers as are inclined to know the history of horses' teeth, and the changes that take place in them, must read Mr. W. Percivall's most interesting lecture on this subject, in the second volume of his *Elementary Lectures*, where it occupies forty-five pages of pretty close type. For the most part we gentlemen-sportsmen think but little of the teeth of the horse farther than as a test of his age; but the following extract will shew that a diseased tooth may be frequently the predisposing cause to that dull and listless appearance which horses often assume, and which is attributed to other causes, and consequently erroneously treated:---

"Diseases of the teeth," says Mr. P. "is a subject upon which I have but little to offer. The horse appears to be but very rarely afflicted with those distressing pains, called tooth-ache, by which the lives of many human beings are embittered; and a most fortunate circumstance it is for him; for, if he were, I know of no signs by which he could with certainty direct our attention to the seat of pain, nor of any means we have of eradicating it by extraction. Still I have several preparations now before me, the inspection of which leaves little doubt in my mind, that the animals from whom they were taken were subjects of tooth-ache; and, if I may venture an opinion from *post mortem* appearances, of a most acute and irremediable description." (Here follow two accurately defined cases.)

"Again: a horse, the property of Government

became a patient of Mr. Cherry's for a copious efflux of fetid discoloured pus from the near nostril, unaccompanied with any submaxiliary tumor or apparent ulceration of the pituitary membrane. For two or three months the case was treated as glanders; but no steps having been gained towards melioration, a consultation was held, and the horse was eventually shot. On examination of the head, the third *molaris* was discovered in part eroded by caries: about one third of its fang was deficient, and the remainder rotten. The tooth was loose in consequence of the formation of an abscess within its *alveolus* which had established a free vent into the contiguous chamber of the nose. The *antrum* was partly blocked up by internal osseous deposition.

"Now, had the molar teeth been examined in this case prior to death, it would unquestionably have led, from the circumstance of one being loose, to a shrewd suspicion of the nature of it, and might have been the cause of saving a life valuable to the service. It behoves the practitioner, therefore, to be on his guard in pronouncing the sentence of death in such affections as these, which are all huddled together at the present day, and styled *chronic* glanders---an indefinite and ill-understood malady, and one under which the above case must have for ever remained buried in oblivion, had not the most laudable motives prompted Mr. Cherry to inspect the parts *post mortem*."

On calling a short time since on Mr. Cherry, a most able member of his profession, he shewed me a file to be applied to horses' teeth, and doubtless

with the greatest effect. The molares or grinders become irregular or jagged, which prevents the proper grinding of the food; and thus quidders, or cudders, are produced to the ruin of thousands of good horses.

Although most gentlemen, on opening a horse's mouth, can tell whether he is a young or an old one, yet I have often marvelled at the very few of my sporting friends who have made themselves sufficiently master of this subject to know the age of a horse, by his teeth---which, as far as I can recollect, I studied about the same time as I studied my Greek grammar, and doubtless with much more pleasure. The knowledge I acquired on this *important* head has not only been profitable to myself, but highly so to several of my friends when in the act of making new purchases. My knowledge here, however, has only extended to the eighth or ninth year, trusting to other appearances than the teeth for ascertaining the age of such as are older; and it was not until I perused Mr. W. Percivall's Lecture that I was aware that M. Pessina, Professor and Director of the Veterinary Institution at Vienna, has made it evident, that, what I may term, the demonstrative changes in horses' teeth proceed regularly *to the twenty-sixth year!* A French veterinary periodical pamphlet also, treading in the steps of M. Pessina, recapitulates the annual changes to the twenty-first year.

M. Pessina observes, there is an after-growth or continued accretion of the teeth; for, if there were not, the gums in the course of time would have to grind the food. He estimates the wear

according to the breed of the horse: in one that is thorough-bred, at one line per annum; in others, at one line and a half. The shoot from the jaw is supposed to be equal to this; so that the original length of every tooth is still preserved. Horses kept at grass wear more than others.

M. Pessina computes the natural age of the horse at thirty. We have several instances in this country of horses living to beyond forty; and Mr. Percivall produces the well-authenticated one of the Mersey and Irwell Navigation horse that died at sixty-six. As is natural to conclude, Mr. P. much regrets the head of the last-named animal should not have been presented to some public veterinary establishment---adding the just remark, that in indifferent hands it became comparatively valueless.

I read with pleasure Mr. Percivall's *signs of age in the horse* unconnected with the teeth, and I am certain they will be acceptable to my readers: ---"The head grows lean and fine; the features look more striking; the hollows over the eyes deeper; the eyes themselves grow irritable, and twinkle; the cheeks become lank; the gums and soft palate pale and shrunk; the sub-maxiliary space is capacious; and grey hairs make their appearance in various places, more particularly over the eyes and about the face. In regard to the body generally, it also makes a more striking display of its shapes than in any former part of life; the neck grows thin and fine; the withers grow sharp, and give an appearance of increased length and obliquity to the shoulder; the back sinks; the quarters

assume a more blood-like turn, and seem to lengthen; tumors of all kinds, spavins, splents, windgalls, &c. generally become in part or wholly absorbed; the legs feel sinewy and free from puff, though they may evince instability and weakness. Now-a-days it is not often that we meet with horses thus advanced in years; still more rarely, with any that have grown decrepit from age."

SALT.

Salt is now become much in use in stables of all descriptions. In my younger days the grand specific for a bad sprain in a horse's sinews was a cataplasm made of common salt and white of egg mixed with vinegar and oatmeal. Salt is now, however, put to other purposes, and given internally to all sorts of cattle with very excellent effect; and appears likely to be as much esteemed among the essentials to the well-doing of the brute race in our day, as it was formerly of the human. I really think it a good alterative---particularly in the cart-horse stable, where I have experienced its good effects, by increasing the urinary secretions and preventing humours. When applied to horses' legs in the way in which I have before spoken of it (*p.* 287), it will be found beyond expectation efficacious: I mean, bathing legs in cold salt and water, to promote absorption, and to reduce enlargements from blows, sprains, &c.

Osmer, whose authority is good, relates a striking fact in allusion to salt-petre taken internally. A horse with the mad staggers broke out of

a stable at a powder-mill, and got to a cistern of water in which there was so much salt-petre that it was barely in a state of fluidity. He swallowed several gallons, which, by promoting a copious secretion of the urinary passages, cured him in a very short time. As nitre, however, in large doses is very apt to irritate the stomach, it should never be given so, unless mixed with some mucilage. The great use of nitre acts as a check on the constitution of horses in very high health; for too much health is often the cause of disease.

SAND-CRACK.

It is somewhat curious that the only instance of sand-crack that ever happened to my stud, was to a new hoof---never shod---on a mare that had been at grass nearly twelve months; and to which case I have before alluded. From so many years' adherence to the in-door system, with all descriptions of horses which have fallen to my lot, mine would have been the stables which many persons would look to for this destructive disease; whereas it does not produce one single instance. I was, early in life, nearly persuaded that unctuous applications were injurious to hoofs; but my experience soon gave me proof to the contrary; and I have always used the following foot ointment:---Venice turpentine quarter of a pound, mixed in half a pound of fresh hog's lard---a recipe in very general use in racing stables.

On the above subject, I was delighted to find myself so fully corroborated by Mr. Goodwin, late

Veterinary Surgeon to His Majesty, in his excellent work upon Shoeing:—"It has been stated by some," says he, *p.* 359, second edition, "that unguents will not penetrate into the horn of horses' feet; but let those who doubt it attend the forge, and examine those feet which are constantly stopped with the tar unguent, or indeed any unguent which has a distinct colour; and if the experiment is made on a white hoof, they will have ample testimony of the depth to which unguents will penetrate. After the unguent has been used a little time, let a slice of the frog be taken off, cutting into the growing horn; give it a sharp bend, with the newly cut part outward; when, on inspecting the bent part, it will be plainly seen the unguent is oozing through the horn. This shews that it is necessary to record facts from observation, and not from imagination. I suspect that all the experiments, which have induced veterinarians to state to the contrary, have been made on the dead hoofs."

SPAVINS.

I have had no experience in spavins—that is to say, I have never had a horse lame with them. I have possessed several hunters with what are called *blood-spavins* (a preternatural expansion of the vessel passing over the hock), but I never regarded them, as I have always found them harmless. This, however, is not always the case. I have also had several horses with every appearance of *bone-spavins*—that is to say, bony enlargements of the inside of the hock joint. It has been my good for-

tune never to have suffered by their presence, no lameness having been produced by them. Some years since I sold a hunter for a good price in Mr. Tattersall's yard. "Do you warrant him sound?" said he,---"To be sure I do," replied I: "I have ridden him nearly three seasons, and he has never been once lame."---"But he has two bone-spavins," resumed Mr. T.---"I know he has," was my reply. The horse remained sound, and gave his owner the greatest satisfaction.

I am sorry to say a great deal of unnecessary torture has been inflicted upon horses in attempts---most of which have been unsuccessful---to cure this too common disease. Amongst these, taking up the vein, as it is called, has ranked nearly first on the list; but, thank Heaven! the operation is now only confined to the lowest orders of country farriers, for the smothering one half of whom there ought to be a law*. I shall conclude this subject

* "This Nimrod would be a second Draco," I think I hear one of my readers exclaim; but I mean what I say. It would be nothing short of an act of humanity and justice to the brute creation, who are as much entitled to our protection as our own fellow-creatures; or at least we have no greater right to ill-use and torment them. That ignorant country farriers put thousands of animals every day that passes over our heads to dreadful and useless torture, it requires not my assertion to set forth; and I will just relate one instance to which I was an eye-witness in 1827:—I was riding along a bye-road, not five miles from my own house, when I saw a horse tied to a blacksmith's door—his head being confined in a twitch—and a smoke issuing from his body similar to that of a newly-lighted fire. I was at a loss to conjecture whence or from what substance this great smoke could arise. Oh, reader! you will shrink when I inform you, that this smoke issued from the withers of this poor horse—he having a fistula in a dreadful state of disease, *the very sinuses of which this ignorant and unfeeling savage had burnt out with a broad red-hot iron!!*

by observing, that, although in incipient cases firing or *very severe* corrosive blistering may cure a bone-spavin, they are wholly inefficient after a certain time, and in cases where the lameness has been considerable.

Perhaps I may attribute my not having suffered by spavins to the great attention I have paid in my purchases of horses to the proper form of the hinder legs. I received a lesson on this point in very early life, and never lost sight of it afterwards. There is a particular formation of the hock joint, which, in severe work, will nearly ensure either spavins or curbs.

The proper way to examine the hocks of a horse is, to stand in the front of him, and look at them, as it were, between his forelegs.

SPLENTS.

Perhaps I have been what is termed lucky in this respect, for I have never had a horse lame from splents but once; and that case has been already recorded in these pages, on account of its singularity in the first place, and held out as a beacon to those who summer their horses in the fields in the second. I should make it a rule never to touch a splent unless it produced lameness, which it does not once in a hundred instances. Blistering, as I have before said, often rouses the sleeping lion, and the whole bone becomes enlarged, so as often to occasion it being struck by the foot of the other leg. That stupid method, resorted to only by the

ignorant, of puncturing a splent with a shoemaker's awl, and then hammering it, or rubbing it with the handle of a pitchfork, is also greatly to be condemned. The greatest proof of the general harmlessness of splents is, that they are never found on the legs of old horses, and unless they have been improperly treated.

STAKED HORSES.

It may be readily supposed, that, from the number of years I have followed fox-hounds in the strongest inclosed counties of England, I have witnessed the death of several hunters by dropping short at their fences, and alighting with the belly on the points of dead stakes, or live growers, either of which will have the effect of letting out the intestines; neither does it require a deep wound to do this, as the rim of the belly is but thin. Once in particular I saw a most distressing case, which occurred when Mr. Corbet hunted Warwickshire. Towards the close of a very fine run, a brook presented itself to our career. Four of us charged it in a line, and got well over; but as we were going, best pace, over *the next field but one*, Will Barrow, the huntsman, called out to Mr. Tarleton, of Bolesworth Castle, Cheshire, to this effect:—"Stop, Sir; your horse's guts are out." On looking at him, I saw his intestines hanging down to the ground; and, it is almost needless to add, I saw his remains on their road to the flesh-gallows the next morning.

Now previously to the arrival of a veterinary

surgeon, there is only one thing to be done by a horse which is staked. The protruded intestines should be replaced as carefully as possible; and, *without any time being lost*, a pocket handkerchief should be applied to the orifice so as to prevent the admission of air. The saddle should be taken off; and by means of the girths tied together by the pocket handkerchiefs of friends---for generally some of the field pull up on such occasions as these---a bandage over the part should be formed. The horse should then be walked quietly to the nearest stable, and there await the arrival of medical aid. In case the intestines do not protrude, this is, I believe, as safe a plan as can be pursued.

In all these cases we lament our inability to administer a cathartic which will operate quickly on the bowels of a horse, but this appears to be a difficulty not yet overcome.

STRANGLES.

Of course I have had my share of strangles, which is, I believe, the only innate disease of horses. It is a most distressing complaint, attended, no doubt, occasionally with acute suffering; and why it should fall to the lot of every horse, ass, or mule, to be afflicted with it, is not for us to inquire. As Nature, however, inflicts the wound, she also generally provides the cure, and I never trouble myself about a colt which has strangles at grass. The act of hanging down his head for his food---which he must perform, or starve---greatly accele-

rates the crisis ; and the thirst which the fever produces, and from which he would suffer more if in the house, is checked by the cooling property of the grass. Great emaciation, however, is often the consequence of this disease, and care and good grooming are very necessary after recovery.

When strangles attacks a horse of mine in the house, I always pursue this plan. I feed him almost entirely on cold sloppy bran mashes, or very young green food ; keep him in a warm, but well-ventilated atmosphere, and let him wear a hood till he is well ; and never let him go out till matter is formed. I confess I have seen but little benefit from fomentations, embrocations, &c. I have been told, that as in strangles no absorption can take place in consequence of the crisis producing suppuration, as well as plentiful discharge from the nostrils, physic is not necessary ; but I conceive it highly so, and I have no doubt many subsequent disorders are produced by the neglect of it, in horses living a life of art. It is singular that this disease should only be infectious to young horses ; those that escape it in youth never being afflicted with it after the adult period.

An attack of strangles often alarms the owners of horses ; for the symptoms not only do not generally differ, but in many there is a perfect identity existing between the two diseases ; and that which is termed bastard strangles often ends in glanders. Symptoms, however, are doubtless often taken for disease, and disease for symptoms.

STRING-HALT.

There has been a good deal of speculative amusement about this rather common defect; but the ablest practitioners of the veterinary art are, I believe, quite at sea as to the cause, or cure. I never saw but one horse with the string-halt in the *fore-leg*. He was going about five miles an hour in a baker's cart, and it gave a singular appearance to his action. The baker told me he was not a shilling the worse for it, for the purpose he put him to.

The following is my own experience of string-halt:—I purchased a horse in Ireland for 25*l.* which had it in both hind legs to a great degree, but no horse could beat him over the Kildare country with the little parson on his back who was the owner of him. I sold him to Colonel Wardle, who rode him several years. He afterwards became the property of a brother-in-law of mine, who rode him till he reached his twenty-sixth year. He was then shot with whole stockings, for I really believe he never fell down in his life. I am much inclined to think the peculiar action of horses thus affected renders them safe on the road. Mr. Benson bought a horse, called *Jack-Catch*, from me, when he hunted in Warwickshire, and, I believe he was never better carried—the horse continuing sound for several seasons, although he had string-halt to a considerable degree in one hind leg. I once had a hunter which had it in both his hind legs, when, being "turned over in his stall," as the grooms say, but never when out of

of his stable; and I had also a cart mare much afflicted with it; and here it is an evil. On the road, it is no detriment to her; but at plough, when going very slow, it breaks the uniformity of her action, and consequently interferes with that of the others. Several good race-horses have been partially affected by string-halt.

SINEWS.

Although all muscular and ligamentous parts are liable to lameness, horses are seldom lame above the leg. Nine times in ten the injury lies between the knee and the ground. I have no reason to complain of injuries to my stud from sprains, having experienced very few bad cases. I can only recollect breaking down one hunter (by a down-leap on to a hard road), and one hack—a thorough-bred one, who broke down in both hind legs at the same moment, when going at the rate of fifteen miles an hour on a turnpike road.

There has been a wonderful deal of nonsense written about sprains in horses' legs*---such as pre-

* When we read the following passage in Taplin's "Sporting Dictionary," we must agree it was high time that some of our regularly-bred veterinarians should take up their pens. "A sprain," says he, "is a preternatural extension, or forcible elongation, of the tendons, or a sudden twist of some particular joint, by which the ligamentary junction sustains an injury, and produces lameness. Horses having encountered such accidents should be turned out in a still and quiet pasture, where they may be free from alarm and disturbance. When at unrestrained liberty, it is natural to conclude they adapt the gentleness of their motion to the state of their case, and exert themselves no more than a proper respect to their own

ternatural extension, and forcible elongation, of the tendons, &c. &c.; but as long as I have been enabled to consult my reason on such matters, I have always treated a sprain as a violent inflammation of the part, and done all in my power to repel it by fomentations, cooling lotions, and a dose or two of physic. Rest---absolute rest---however, is the grand specific: and does not the animal tell us this? for when a horse goes lame, is he not then resting the injured limb?

Blistering and firing, as I said before, are coupled together like two hounds, and one or the other of them generally is resorted to in the cure of bad sprains. If there is enlargement afterinflammation is subsided, some stimulant must be used; but, since I have experienced the effect of the mercurial plaster, I am quite out of conceit with blistering. If firing must be resorted to, the operation should not take place till some months after the injury has been done, and until the horse has done a little gentle work.

Bones, tendons, and ligaments have little or no sensibility till diseased, but then they are exquisitely sensible, and horses suffer much bodily pain in bad sprains of their limbs; and hence the great necessity of physic, bleeding, and otherwise unloading the vessels near the affected parts.

Bad riders are very apt to lame their hunters in riding them over a country. If it were possible to

safety may render secure. It is a self-evident fact, that a restoration of elasticity or strength of part is more likely to be obtained by rest, and the efforts of nature, than any topical application that can be made!" Well done, Mr. Taplin!

give every man a good hand on his horse, there would not be so many lame ones as there are at present. I have reason to believe there have not been so many hunters lamed in their sinews since the practice of caulking the outside of the fore shoe has been discontinued. Mr. Warde assures me he has found a difference of at least one half.

On the subject of breaking down, as it is called, I met with the following passage in a work called *The Veterinary Surgeon; or, Farriery taught on a new and easy Plan*, by John Hinds, V.S.:—"CAUSE OF BREAKING DOWN—Simple relaxation of the tendons and ligaments that support and keep together the pastern bones. Grooming overmuch by *hand-rubbing* the heels until the tendon is divested of most of its muscular covering, and it becomes naturally cool and elastic." To this passage is annexed the following note:—"This hand-rubbing causes lymphatic absorption of muscle, until tendinous substance supplies its place; and as the former state had been too fleshy and warm, so is the latter too cold or elastic." I make no comment here.

SORE BACKS.

It is many years since I have had occasion to discontinue the use of a horse by reason of a sore back. Common attention to saddles (made by good saddlers), by drying, beating, and brushing the pannels of them after use, is all that is wanted here. Heavy women, however, and many horsemen, from a peculiarity of seat, are apt to wring

horses' backs. The skin also of some horses is so tender that it will gall with very slight pressure, as was the case with Shamrock; and I was obliged to ride him with a sheep-skin under his saddle to my no small discomfiture, for it has a very ungentlemanlike appearance by a covert's side in Leicestershire. Sore backs are easy to cure if the injury does not extend to bones or ligaments. Strong repellent lotions, if the skin is not broken, are the best means to apply at first; but if a sit-fast takes place, either the knife or some very strong detergent ointment must be had recourse to. I have seen some very awkward cases of sore backs, proceeding from various causes, and often very difficult of cure. They require a nice treatment, and veterinary aid should be timely called in. On a horse receiving an injury of this sort, it is always advisable to strip him of his clothing, as the heat of it adds to inflammation, and retards the cure. Recollect! poll-evil, fistula, and sit-fast, are very near relations.

STABLES.

Having, in a vast number of instances, seen horses produced in very bright condition from very indifferent stables, I was for many years of my life very indifferent about the structure of them. Few men, however, have put their good and bad properties to the test more than I have done, in the roving life I have generally led with my horses in the winter months. It may appear strange, but in my

younger days, I cared little what sort of a building my horses were put into, provided I had it in my power to stop up every hole and crevice about it, and as nearly as possible approximate it to a hot-house. As for ventilation, I never dreamed about it; neither did I consider it at all essential to the health of my stud. All I can say is, that, with such fearful odds against me, I had no inflammatory complaint in my stable until I had been an owner of hunters for more than ten years, during more than eight of which my daily morning salutation to my groom in the winter was---"Well, Ned, is the stable warm and comfortable?"-- "Pretty well, Sir."---"That's right, Ned: put lots of dung outside the door; stop up every crevice over their heads; stuff the foot of your old stocking in the key-hole; and mind there is no cracked pane in the window." Now it is quite evident that Ned* and his master were two ignorant boobies; notwithstanding which their horses looked, and were, well. I must also add, that this practice was not confined to my own stable, but was in pretty general use with some of my neighbours, who liked to see their horses look bright and well; and furthermore, I am quite satisfied inflammatory attacks were not more frequent or fatal among hunters at the period I am speaking of, than they are at present.

In a small pamphlet on the *Diseases of Horses*†,

* This Ned, it must be observed, was a most excellent groom, and, having served me faithfully for nine years, obtained 100*l.* per annum wages as hunting groom, and now keeps a very respectable inn.

† By Mr. Edward Hickman, V.S. &c. published in 1823, and dedicated to John Mytton, Esq.

the writer chiefly attributes what may be termed the indisposition of horses to the improper construction of stables; and for which he considers the county of Salop to be notorious. "The consequences," says he, "of an ill-ventilated stable are of a very serious nature; they are not calculated upon until your horse points them out in language not to be misunderstood; and, unless the most active measures are adopted, the rapid progress of the diseases produced by it will baffle all your endeavours, and your horse become unsound for life. When a stable is too much crowded or ill-ventilated, a *very powerful poison* is generated there---the pernicious effect of which soon shews itself, especially if you bring a fresh horse within its sphere of action." Mr. H. then proceeds: "A hunter is brought from grass in full health---he is put into a crowded ill-ventilated stable---in the course of the night, or on the following day, he is seized with a violent shivering; irritation in the throat follows, with a cough, difficulty of breathing, and inflamed eyes." Mr. H. now produces some cases of horses thus affected, which, however, we can only look upon as the natural consequence of bringing a horse, which for three or four months has been breathing fresh air in his pasture, all at once to respire the hot and stimulating atmosphere of a crowded or ill-ventilated stable.

Now notwithstanding my conviction of the high temperature in which a horse kept all the year round in the stable will live and enjoy the highest health, yet my common sense points out to me the necessity of the means of ventilation. These means

however, should, for hunters or race horses, be limited. No streams of air*; no broken windows (for a horse should stand in an equal temperature, and this he can never have if the windows of his stable are broken, as it will then depend on the point the wind blows from); but small wooden tunnels, ascending through the roof, the tops of which should be constructed so as to prevent the rain descending through them.

It does not require a philosopher to point out to us, that, when the air of any building becomes more rarified than the external air, a wind or current of air is pouring in from the crevices of the windows and doors, to restore the equilibrium; but the light air with which the room is filled must find vent, in order to make way for the heavy air which enters. This fact is proved in the following way, and has often been the sport of children. If we set a door a-jar, and hold a candle near the upper part of it, we shall find that the flame will be blown *outwards*, shewing there is a current of air flowing out from the upper part of the room. Now if we place the candle on the floor, close by the door, we shall perceive, by the inclination of the flame, that a current of air sets into the room, and therefore the flame will be blown *inwards*. In fact, the current of warm light air is driven out to make way for the cold air which enters; and this, I believe, is the case in the grander scale of Nature. The light air about the Equator, which expands and rises into the upper

* If any cold air be allowed to enter a stable, it should, as Mr. Hickman observes, be through apertures at the bottom of *the back wall*.

regions of the atmosphere, ultimately flows thence back to the Poles, to restore the equilibrium.

The influence that cold, combined with humidity, exercises over the animal economy, is too well known to be dwelt or enlarged upon, and I never yet saw a horse produced in perfect condition from a cold and damp stable. The latter evil property is not sufficiently appreciated; but, very early in life, I saw its baneful influence. A friend of mine, residing under the Broadway hills in Worcestershire, paid the greatest attention to the condition of his hunters, but never could attain it there, although, to the eye, his stable was everything we could desire, *and it was warm and well ventilated.* When his stud moved to Stratford-on-Avon in Warwickshire, where his stable was very inferior to look at, they immediately improved in their condition. The fact was, the first-named stables were damp, although he drained them; and the latter were dry.

Mr. Percivall (Lecture 38) says---"He that has clean and cool stables will have a healthy stud; and the converse of this will never fail to engender disease. Above all other considerations then, in taking the colt from his natural state, it behoves us to guard him from the vicissitudes of cold and heat, and to keep him in an atmosphere as pure as that of which we have just deprived him." This is strongly in favour of the regular in-door system; for we know the out-door system is anything but regular: yet, with great deference to Mr. P., he has gone a little too far here. In the first place, it is impossible to keep a stable as pure as the open

air; and, in the next, it is by no means essential to a horse's health that it should be so, or that he should be kept cool---*on the contrary*, if a hunter or race-horse. I maintain the contrary, on experience; and affirm, that a temperature of sixty-two or sixty-three is almost essential to the perfect condition of horses. Here, with respect to the race horse, I am backed by Mr. Darvill in his Treatise on *Training the English Race Horse*, who says, that thorough-bred horses, which have originated in a hot climate, are not to be got into racing condition unless kept in a stable of a certain temperature of heat, which he estimates at sixty-three*.

Another writer on the diseases of horses says---"The moment parturition is accomplished, the subsequent existence of animals depends so much on respiration that they enjoy health, activity, and vigour, or become enfeebled, emaciated, and diseased, according with the degree of purity, or the state of contamination of the atmosphere in which they breathe. For it is to be observed, that the air, in its passage through the lungs, undergoes a decomposition---the oxygen, or vital part, being absorbed by the blood; and with this fluid, carried to every part of the system---to which it imparts life and vigour---the azotic gas thrown off by expi-

* Mr. Darvill properly observes, there should be a thermometer in every stable, which should be consulted before it is shut up at night. When on this subject also, Mr. Percivall writes thus:—"I ever, to the extent of my power, inculcated ventilation, which I have always found to be compatible with as much warmth to the skin as was necessary to the production and preservation of a fine coat."

ration, though it may retain its elasticity, is nevertheless deprived of that vivifying principle essential to life: hence it will appear that disease must necessarily prevail in stables where a great number of horses stand together." Now this is very pretty theory, and in part correct in principle---that is to say, were a parcel of horses, just taken out of their pastures, or from camp, huddled together in a close ill-ventilated stable, with bad grooming to boot, the effect would be as described: but had the writer visited the great stable at Quorn in Leicestershire, for the last twenty-five years, and seen thirty horses standing in it, all in perfect condition, what would become of the greater part of his theory? It reminds me of Mr. Darvill's remarks (himself one of the profession) on the writings of such veterinary surgeons as have treated of getting horses into condition, where he speaks thus:---"It does not appear," says he, "in any of their (the veterinary surgeons) works which I have read, that those authors have done much in this respect, for these poor fellows (grooms), beyond that of recommending them to keep their horses in cold stables!"

I have good reason to believe there is no vapour which acts more offensively on the eye-sight than animal excretions; and our own feelings convince us of this whenever we enter a dirty stable. Here, however, a great change has taken place in the practice of grooms, and a most beneficial one it is to horses under their care. The old plan was to put a very large bed of straw in a horse's stall twice a-week, removing very little of the foul litter at other times. The consequence was a great

accumulation of offensive matter, the greater part of which is now removed every day, and fresh straw supplied. Another improvement has also suggested itself. The truss is cut through with a hay-cutting knife, which makes the straw go much farther, and for this obvious reason---when it is of tolerably long growth, one end of it gets stained, whilst the other is quite clean; but in this case, of course, it must all be thrown out together.

Apologizing for this trifling digression, I proceed to state, that a clean, wholesome, warm, and dry stable is a great desideratum in getting horses into condition; and, although I would not carp at trifles, yet if a person were to say to me, "I will build you stables for eight hunters for your own use," the following should be the plan.

I would have two four-stalled stables, in which I would keep only six horses---*i. e.* three in each; and I would have a loose box at the end of each. If possible I would have a southern aspect, with windows opening from the top or downwards; or else on a pivot in the centre, and placed so high in the wall, that, when open, the air may be circulated through the stable, without affecting one horse more than another; and the height of the interior should be only twelve feet in the clear. I would have the stalls paved nearly flat, with only a trifling inclination to the centre; in each of which there should be a small grating over the drain, and the stalls should be no more than six feet wide. There should be at least twelve feet behind the horses, and the exterior walls and doors should be very thick. The wooden partition walls of the

loose boxes should be only nine feet high, with wooden bolts to the doors; and each box should not exceed ten feet square. The saddle-room, well fitted up with saddle cupboards, boiler, &c. should be in the centre of the building; in the front of which there should be a passage, under cover, for horses to stand in when their legs are washed. Of ventilation I say nothing, that being a matter of course; but I would have the sides of the stalls nine feet high at the head, with small iron racks, and pillar reins for each horse to be dressed in. I should always be very particular about the stall-posts; for these are very frequently the cause of severe injury. When I went to see the King's stables at the new palace at Pimlico, I was astonished to see almost every other horse in them with capped hocks. On inspecting the stall-posts I perceived the cause. They were of fluted stone, and with angles, which proved that Mr. Nash knows nothing about the *inside* of stables. Stall-posts should be made of wood, quite smooth and circular; and they should extend to the ceiling, or at least ten feet high.

Methinks I hear the question asked---Would you not have more loose boxes? A trifling addition converts each stall into a box. Two bars, from the two centre stall-posts to the wall, convert these stalls into loose places, quite sufficient for the purpose we require of them; and the horse that is loose is prevented, by a very simple contrivance, from annoying the one that is tied up. In the stables of Sir John Dashwood King, at Halton House, Bucks, I first saw this used. It

consists of a light cast-iron guard, hitched to the stall-post in the first place, and then to the top bar or rail, and extending only far enough to prevent the loose horse touching the quarters of the one tied up with his mouth, which otherwise he would be inclined to do: thus it is evident, that, out of eight horses, four may always be loose, which, in my opinion, is quite sufficient for horses in constant work. One little improvement, however, may be suggested here. To one of the loose boxes at the end, there should be an outside door; then, in case of a horse expected home out of stable hours, he may be taken into his box and dressed without disturbing the stud.

When we consider that after every hard day's work with hounds an effusion of lymph takes place in all those parts which are exposed to severe friction, it is unnecessary to remark that the sooner absorption of that lymph takes place, the sooner is our horse fit for work, and the less liable is he to become injured from the effects of bangs or blows which his legs may have received. Now an admirable auxiliary here is the power a horse has, when loose, to shift his position as often as he feels inclined, and to put his whole frame into motion, to the very great relief of all the muscles and joints in his frame. Loose boxes are also recommended for mares in the spring of the year, for reasons too obvious to specify, and for all horses labouring under disease, or lame, and for such as carry very heavy weights.

The permanent objection to loose boxes, for general use, consists in the great space of ground

stud loose. Indeed it is not only unnecessary to do so, but in some cases I am far from being an advocate for loose boxes---at least the constant use of them. In the first place, to horses which have thin, fleshy feet, with thrushy frogs, they are decidedly injurious. They are equally so to cribbiters and horses inclined to be vicious; although these inconveniences should be overlooked for a day or two after a very severe run, for the reasons I have just stated.

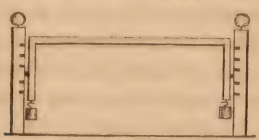
Scarcely a year passes over but some new plan or plans present themselves for improvement of stables: amongst them is one which Mr. Dickenson, of New Park Street, Southwark, London, has published to remedy the ill effects and lessen the waste of corn, caused by the manner of feeding a horse, by which he spills a great portion, and swallows a great deal unmasticated, which passes through the body unchanged. Mr. Dickenson has invented his *masticator*, which is employed in the following manner:---A part of the manger, about eighteen inches long, is separated from the rest by a partition, into which the feed of corn is put, and over this the masticator---which is made of a thin plate of wrought iron, about one inch less both in length and breadth than the receptacle in which it is put---uniformly cut out into square holes about five-eighths of an inch diameter. The horse, in feeding, works this plate about with his mouth and tongue, and easily extracts the corn as rapidly as he can thoroughly masticate it, proceeding at length to clear away every grain, when the masticator lies flat upon the bottom of the manger.

they occupy, so that it is impossible to keep a large The beneficial consequences that result are, an increased facility of digestion, inducing health and enjoyment to the horse, and the saving of a considerable portion of corn, commonly wasted in the ordinary way of feeding.

Now taking for granted that this statement is correct as far as relates to the horse being enabled to get at his corn through the interstices of this machine, I hesitate not to say it must be used with benefit to some very greedy feeders; but as for the better masticating the corn, there is a simpler method of obtaining this end, by first bruising it in a mill. This method, so often preached up, has always hitherto been lost sight of again; but it is once more reviving in the stables of those who are good judges of such matters. I am fully convinced of the very great saving produced by it—I would say, at least, one part in four—and I think it will soon come into very general use. If oats and beans will grow and flourish, after having passed through the stomach and intestines of the horse, let me ask the physiologist what nutriment could the animal have derived from them?

As Mr. Dickenson may be considered a practical man—having more than once been seen in Leicestershire, and always particularly attentive to his horses---and a leaping-bar being a kind of accompaniment to a stable, I present my readers with a description of his. Two upright posts are fixed in the ground, between which the bar is made to revolve between two axles, situated as here drawn. In order to keep the bar poised in the

situation shewn, weights are suspended at the extreme ends; so that in leaping, should a horse push or strike against the bar, it bends down to the earth before him, and he infallibly clears it, even if he were not to leap a foot high. As some horses may not be disposed to leap when they have discovered the trick of the bar, it may be loaded with more weight, and they may thus be punished into the performance. The bar may also be fixed by bolting it with a little bolt shot into the side posts. The notches in the posts are to receive the axles of the bar, to raise or lower it as required. This may be said to be a sort of cockneyish contrivance, but I think there is merit in it; and I am far from condemning the use of leaping bars, as it is so much the fashion now not to consider a horse a perfect hunter unless he will leap timber in a stand.



THICK WIND.

As Mr. Percivall very justly observes, the theory of a disease consists, first in discovering its seat, and then in demonstrating its nature. Now in this instance I shall attempt neither the one nor the other; but it may be naturally supposed, that, in the numerous horses I have ridden and driven, I have seen vast difference in the natural state of the wind. Some, though apparently sound, can do but little in fast work---I mean with hounds---unless

very well prepared; whilst others can go a sharp burst, even if taken by surprise. By thick-winded horses, however, we generally imply those whose organs of breathing are diseased, many of which, with care, can go a good pace either in or out of harness.

I have had several thick-winded horses in my stable. I never found them better for anything in the shape of pectoral medicine, nor do I approve strong physic. Light doses---little more than alteratives---frequently administered, have most effect, with plenty of exercise, and a regular adherence to the hard meat and in-door system. I am perfectly aware that it would be in vain for me to talk to half the world of the impropriety of letting such horses as these---or even broken-winded ones---live entirely on green meat when it can be had; but my experience has convinced me it is highly injurious. Does not flatulency accompany every stage and degree of disordered respiration? Why then load the stomach with a heap of such food as must from its nature produce it? No---good grooming, plenty of work, good hay and oats, frequent discharges of the bowels, and occasional use of tonics, will alone render a thick-winded horse equal to all that can be expected from him---not forgetting the setting muzzle the night before fast work, if he be given to eat his litter.

On the bad effects of a distended stomach, even on horses that are sound, I will quote from Mr. Percivall's able and most entertaining Lecture on the Stomach---which, in the horse, is smaller in proportion to the size of the animal than any other

we know of:—"The stomach," says he, "is situated principally in the left hypochondrium, which it nearly fills, extending more or less into the epigastrium, according to its state of distention; its anterior part lies in contact with the liver; its left extremity is opposed to the diaphragm and spleen; it lies in part upon the small, but mainly upon the large intestines. It is evident that the full and empty conditions of the stomach will affect its position in relation to the neighbouring viscera, and that the motions of the diaphragm will alter its situation; for during the recession of that muscle, it must be pushed into the umbilical region. On the other hand, the action of the diaphragm will be interrupted by distention of the abdominal viscera, and more particularly by fulness of the stomach; for increased pressure will counteract its efforts to recede, and the chest, under these circumstances, will be expanded by the other inspiratory agents—the intercostal muscles, and those passing from the ribs to the fore extremities. This accounts for the inaptitude of horses recently fed to undergo violent exertion, and the increased embarrassment in perspiration that hard work then occasions, why they should be sooner blown; and why they will, if pressed, absolutely sink from exhaustion. Hence the practice of keeping hunters short of water, and feeding them unusually early, and on corn only, on the morning of hunting."

Some most interesting facts relating to wind in horses are elucidated in Mr. Percivall's Lecture on the Physiology of the Stomach. He plainly shews us that Nature must have intended this animal for

the greatest exertions of speed, from the care she has taken in the formation of this essential part. "First of all," says Mr. P. "let us inquire why Nature, who has given four stomachs to the ox and sheep, should have restricted so large an animal as the horse to one, and should have made that one much smaller, in comparison to the bulk of the body, than those of man and quadrupeds in general---a fact of which I have already given some demonstration, by actual comparative admeasurement. And what makes this investigation the more curious and interesting is, that, although the stomach of the horse will contain so little, his consumption of food is not only greater than that of carnivorous and many other animals, but the aliment on which he lives is of that kind which necessarily occupies very considerable space, either in or out of the body. A man probably will consume about a pound and a half of solid food at a meal; a horse, we will say, about six pounds---all, or a great proportion of which may be hay; and this, in respect to bulk, will occupy twelve or even twenty times the space that a pound and a half of any sort of cooked meat or vegetables will; and yet the stomach of the latter will not contain three times as much as that of the former*! One natural and self-evident conclusion from the foregoing fact is, that the food which a horse eats cannot remain long in his stomach---that portions of it must successively pass into the intes-

* The stomach of a middle-sized man will contain more than three quarts of water; whereas that of an ordinary-sized horse, whose body exceeds his in weight and bulk by eight times, will not hold more than three gallons, or four times the quantity of the man's.

tinal canal, at short intervals, during the time of feeding, in order to make room for those last swallowed. --- It would appear, then (adds Mr. P., *p.* 502), that the stomach of the horse, in comparison to that of other animals, is made proportionally small, in order to render him more effective as an animal of speed and burthen, and in course more useful for the various purposes for which he is employed by man."---Mr. Coleman says, the horse is the only animal that can be compelled to take violent exertion after a full meal.

Mr. Percivall tells us, that in the horse the gastric process of digestion is very active, and it was necessary that it should be so; "for being an animal," says he, "that feeds beyond what in others constitutes satiety---distention of stomach---chyle must be continually flowing out in order to make room for the aliment he continues to take in." Of course, as he observes, the duration of this process varies with the nature of the food; but the following experiments will refute what I have heard so often insisted upon---namely, that a horse cannot endure long fasting without considerable exhaustion and danger to his general health:---"December 1823, a young female ass was taken up from grass and kept fourteen hours without food or water. A quartern of oats was then given to her, which she ate in about twenty-five minutes. Six hours afterwards she was bled to death. The stomach contained both grass and corn; the former occupied the vascular part; and the boundary line between it and the corn, which all laid in the cuticular pouch, precisely corresponded with that formed by

the borders of the sensible and insensible linings. The grass was dark-coloured, soft, and pulpy, and had much the appearance of chopped or mashed boiled spinach. The corn preserved its colour, was sheathed in a layer of mucus, was humid, and emitted a faint sour odour!" We may conclude from this, that no danger can arise from a hunter being absent ten or twelve hours from his manger.

As almost all defects of wind are produced by inflammation of some parts of the organs of respiration, and which inflammation is caused by catching cold, or by bad grooming, which occasions plethora, &c. it behoves us to expose the extreme excitability of these organs as little as we can help to the predisposing cause.

THORNS IN LEGS AND STUBS.

There are few cases of mechanical injury to which the horses of fox-hunters are more liable than thorns in their legs, or stubs in their frogs or fetlocks. These subjects have been very little noticed by veterinary writers; but there is a field for a display of their knowledge in the art of extracting, and healing. With thorns, of course the first point to be desired is extraction; but then it is often difficult to find the seat of them: also, when the seat of them is found, they are not always easy to be got at; in which case I have never been sparing of the knife or lancet. Sometimes, however, we are compelled to wait for suppuration, which must be encouraged as much as possible. In two instances it has happened to me, that four or five gatherings of pus have been collected and discharged before

the thorn would make its appearance---it having been, of course, deeply seated. I have the point of a black-thorn, three quarters of an inch long, now in my possession, that a hunter of mine carried nearly a whole season in his fetlock joint, causing suppuration after every day's work. He was a game horse, or he would not have worked sound with it, which he never failed doing when he had got a mile from his stable. *Had he not been worked* he would have been ruined for life.

The following case will shew how necessary it is to cut and search for thorns, when there is every reason to believe a horse is lame from that cause. Some years since I sold a mare to an intimate friend for a good round sum. The second season he lamed her; and, after having been severely fired by the late Mr. Walton, V. S., of Shiffnall, she was turned out for the summer. When she came into work again the following autumn, a large black-thorn issued from between hair and hoof! She was then sound; but it availed nothing, for she caught cold at grass; became a roarer; and this capital mare---for there were few better---was thus rendered useless from want of proper management.

More hunters are ruined by stubs or splinters of wood running into their legs and feet, than by thorns. Indeed, when we reflect on the many hundred times in the course of a season that hunters, ridden in close woodland countries, alight, from high banks, on ground nearly covered with sharp pointed stubs, from which fagots, stakes, &c. have been cut, we must confess our surprise that

accidents do not oftener happen. Many good horses, however, are, I fear, annually lamed by being stubbed, as we call it, many of which are so far injured as to be destroyed.

In the first place there is no judging of wounds but from appearance and locality; therefore a description of them is useless. Add to this, it so often happens that ligaments, tendons, or nerves become wounded, the treatment of which---fatal consequences being always so near at hand---requires all the skill of the regularly-bred veterinarian, who alone is fit to direct it, and observe the attempts of Nature in their progress. Contused and lacerated as the parts are from accidents of this nature, we cannot be surprised at the violent inflammation which too often ensues.

THOROUGH-PIN.

Most old hunters have them to a certain degree. Like blood spavins which they strongly resemble, the less they are tampered with the better. If they do produce lameness, a dose of physic and rest are the best remedies.

WINDGALLS.

A windgall is an enlargement of the mucous capsule of the pastern joint, filled with fluid, and not air, therefore improperly christened. In legs not made of the best materials they are generally found, more or less, if they have been used on the road at an early age: whereas, in better organized

limbs, no ill usage can produce them. Although I would not give a large price for a horse whose legs were much "wind-galled," yet I am at a loss to produce an instance of lameness arising from them in my own stable. They often appear to be absorbed by rest, but return after hard work. I should rather be without them.

WORMS.

I think lightly of worms. A dose of mercurial physic has always answered the end in my stable; but I have very seldom had occasion to resort to it on this account. Horses that are properly physicked, and regularly dieted, are but little subject to worms---that is to say such as are liable to injure them. As for bots, we learn from Mr. Bracy Clarke, they have a salubrious influence on the stomach of the horse, by promoting digestion. Be this as it may, very few horses---none I believe which have been at grass late in the summer --- are free from bots. Their natural history, provided it be correctly given us, is extremely curious; and it is no less extraordinary that no medicine which can be administered to a horse will occasion their death. "That Nature," says Mr. Percivall, "should have created an animal, and designed it as an inhabitant of the stomach of another animal, without some good, but, I suspect *unknown end*, I think, in unison with others, highly improbable, and irreconcilable with other beautiful and more readily-explained operations. I am, however, for my own part, unable to draw up the curtain which is here interposed between fact and design."

YELLOWS.

As horses have been pronounced gouty, there is no reason why they should not be bilious; and, when bilious, yellow. I never had but one horse affected with the yellows, and he was soon put right by a mercurial purge. The complaint is caused by bad grooming; but it is one that greatly debilitates, and good grooming is very necessary on recovery.

THE END.

ERRATUM.

After the sheet was put to press we received the following communication from NIMROD: "In speaking of the effects of hot and cold stables,' p. 77, for 'I have always used very warm stables, not lower than *fifty-three* degrees of the thermometer in the winter time,' read, *sixty-three*."

INDEX.

Abernethy's (Mr.) experiment on a rabbit, 170
Action of the hackney described, 15
Action, importance of, 20
Age, signs of in the horse, unconnected with the teeth, 454
Alterative medicines, the importance of, 58, 175, 178, 191, 260, 418, 426
Alterative ball, recipe for, 253
Anecdotes:—of Lord Maynard, 19; a Gentleman and his huntsman, 20; Mr. Forester of Willy Hall, 29; an old Lady and her carriage horses, 48; Nicks, a highwayman, 56; a Naval Officer, 63; Col. Thornton, 136; a blacksmith at Mitcham, 164; Lord Mansfield, 172; a young hound and a dying fox, 194; Emperor Darius, 237; a regimental chaplain and a Scotch physician, 425
Animal life, difficulty of determining the nature of, 3
Animals the most timid, hardest to tame, 5
Antimony, mildness of, as an alterative, 179
Antimony, efficacy of, 253
Apoplexy, caused by bad digestion, &c. 281
Apoplexy, treatment of, 482
Arabia, three classes of horses in, 9
Ass, result of an experiment on the stomach of an, 483

Ball, alterative, recipe for, 253
Ball, laxative recipe for, 440
Ball, mineral tonic, essential to condition in particular cases, 218
Ball, stimulating, in cases of distress, recipe for, 273
Bangs and blows, treatment in cases of, 286

Barclay's (Capt.) performance in the Bicester country, 82
Barmaid, a favorite hunter, case of, 194
Beans, the proper allowance of, for a hunter, 60
Bevilled shoe, sketch of a, to prevent over-reach, 234
Black balls, of what materials composed, 175
Blacksmith of Mitcham, anecdote of a, 164
Bleeding, indispensable in cases of inflammation and overmark, 174
Bleeding, importance of, 297
Bleeding, cautions regarding, 300
Bleeding, comparison between the phleme and lancet in, 300
Blindness, general observations on, 290
Blistering, observations on, 105
Blistering, the most effectual method of, 106
Blistering and firing, on the relative sufferings caused by, 108
Blisters, cautions against the indiscriminate use of, 288
Blood vessels, on the rupture of, 297
Body, general state of the, indicated by the dung and urine, 422
Boerhaave's definition of the plethora, 99
Bone, navicular, situation and office of the, 148
Bowels, relaxed, singular instance of, in a mare belonging to Mr. Warde, 190
Bran mashes, use and abuse of, 98
Breaking down, cause of, 466
Breeding, the principles of, well understood by Virgil and Pliny, 11
Breeding, no branch of rural economy more neglected than, 219
Breeding, profits derivable from, 220, 234
Bridle, description of Mr. Lindo's, called the clipper, 275
Bronchotomy, description of the operation called, 448
Brood mares, owners of inclosed grounds obliged to keep two, *temp.* Henry VIII., 11
Broken knees, remarks on, 287
Broken wind caused by the improper use of hay, 100
Broken wind, considerations on, 283

Camphor, description of the properties of, 418
Canter, the favorite pace of road riders, 19, 370

Capped hocks, notice of, 304
Capped hocks, prevalence of, in the King's stables at Pimlico, 475
Caricature, description of a hunting, 66
Castration, the proper period for, 222, 304
Catarrh or cold, treatment of, 306
Changes, proof that habit lessens the influence of all, 170
Cherry's elastic pads for stopping horses' feet, 391
Chronic cough, treatment of, 203
Chronic catarrh, symptoms of, and remedies for, 307
Cleanliness, the importance of attending to in stables, 473
Clipper, The, Mr. Linde's brilliant hunter, 14
Clipping hunters, considerations on, 206
Clipping, the author's opinion on, 226, 238, 241, 256, 310
Clipping, advantages of, 236
Clipping, benefits resulting from, enumerated by Equestris, 241
Clipping, disadvantages of, 256
Cleveland (Marquis of), treatment and state of the stud of the, 277
Coffin lameness of the ancients, the navicular disease, 154
Coleman (Mr.), first principles of veterinary science in this country developed by, 144
Coleman's (Mr.) opinion that horses may be gouty, 183
Colic, spasmodic, description and treatment of, 307
Colt, treatment of the, 221
Colt, when designed for a hunter, 235
Coombe (Mr.) Harvey, a convert to the in-door plan, 249
Condition, preliminary remarks on, 23
Condition, silence of veterinary writers on the subject of, 23
Condition, Dr. Johnson's definition of the word, 26
Condition, the importance of, 27
Condition, the effect of, 55
Condition the work of time only, 57
Condition, the beneficial consequences of good, 64
Condition, dependent on the state of the blood, 177
Constitutional peculiarities, importance of attending to, shewn in the cases of Lord Foley's Ospray, Lord Oxford's Victoria, the dam of Sailor, Mr. Mytton's Euphrates, Major Pigot's York and Mantidamun, 197
Contracted feet—the effect not the cause of disease, 134

Contracted foot, extraordinary specimen of a, 152
Cooper (Sir Astley), extract of from the lecture of, on Scrofula, 171
Cordials, the use of, in cases of distress, recommended, 186
Corns, nature and treatment of, 302
Crib-biting, a few words on, 305
Cub-hunting, a melancholy recreation, 56
Curbs, nature and treatment of, 300
Cutting, cause of and remedy for, 314
Cyrus, devotedness of, to horses and horsemanship, 11

Darius, anecdote of the Emperor, 237
Diet, an essential point to be attended to, 59
Disease, navicular, description of the, 148
Diseases hereditary, considerations on, 294, 315
Diseases of the feet, extract from Mr. Goodwin's treatise on, 161
Diseases peculiar to the fore and hind feet, 371
Distemper, nature and treatment of, 314
Diuretics, use and abuse of, 319
Divine wisdom, infinity of, 1
Docking, on the operation of, 317

Eleanor, performances and produce of, 12
Emetic tartar, Mr. Taplin's erroneous opinion regarding, 177
Emetic tartar, more active in its operations than antimony, 179
English horses, the breed of, improved by William the Conqueror, 11
Equestrian art, by whom first cultivated, 8
Euphrates (Mr. Mytton's), constitutional peculiarity of, 197
Evacuation, periodical, necessary to preserve health, 123, 178
Exercise, instructions regarding, 128
Exercise, advantages of walking during the summer, 160
Exercise, the benefits resulting from moderate and regular, after the colt is perfect in his paces, 222

Farcy, Mr. Percivall's description of, 323
Farmer's, a, opinion on the treatment of hunters, 115
Farmers, advice to, on the subject of breeding, 219, 224

Farrier, horrible instance of cruelty perpetrated by an ignorant country, 458
Farriery, absurd nostrums of some of the old writers on, 124
Farriery, bleeding one of the most important operations in, 298
Feeders, recipe for delicate, by Lord Stawell, 189
Feeding, remarks on, 61, 83, 99
Feet contracted—the effect not the cause of disease, 134
Ferryman, a hunter, particulars of, 68
Fever in the feet, causes of, 388, 416
Fever, hunters never free from, after a severe run, 322, 416
Field's mercurial charges, notice of, 271
Firing, observations on, 107, 271, 324
Flannel bandages, benefits derivable from the use of, 86
Flies, sad annoyance to hunters exposed to noon-day sun, 266, 278
Foal, early treatment of, 221 ; time for weaning, 221
Foot, form and construction of the horse's, 130
Foot, original form of the, unconnected with soundness, 134
Foot, case of incipient disease in a perfectly formed, 138
Foot, contracted—an instance *è contra*, 140
Foot, extraordinary specimen of a contracted, 152
Foot, a perfect, one of the finest specimens of the plastic art, 348
Foot, description of a weak, 363, 381
Foot, description of a strong, 380
Foot, pumice, the most difficult to preserve sound, 382
Foot, description of a good, 386
Foot, essentials to constitute a good hunter's, 408
Foot lameness, the infrequency of, in foreign countries compared with England, 153
Foot lameness attributable to weak organisation of the internal parts of the hoof, fever produced by excitement of high food and hard riding, concussion, improper position of the limb, &c., 341, 353, 363
Foot lameness, shoeing not a general cause of, 343
Foot lameness, infrequency of in Wales, 347
Foot lameness, causes of the increase of, 402
Foot lameness, general inflammation of the vascular system the principal cause of, 421
Fordyce's (Dr.) experiments on gold and silver fish, 171

Forester, Mr. of Willy Hall, anecdote of, 29
Foulness, the distinguishing symptoms of, 173
Foulness, treatment for, 179
Founder, in the foot, the navicular joint the general seat of the, 151
Founder, the foot never the seat of, 349, 371
Fox-hunting, change in the system of, 29
French system of shoeing, observations on, 401
Fret. *See* Colic.
Frog, on the functions of the, 145, 359, 387

Glanders, extract from Smith's Treatise on the, 116, 207
Glanders, considerations on, 325
Gold and silver fish, Dr. Fordyce's experiments on, 171
Goodricke (Sir H.), treatment of the hunters of, in the summer, 254
Goodwin on Diseases of the Feet, extract from, 161
Goodwin (Mr.), on preparing the hoof for the shoe, 404
Goodwin's (Mr.) sketch of the concave seated shoe invented by, 410
Goodwin's (Mr.) cast-iron road shoe, description of, 412
Goosander (dam of Sailor), notice of, 77
Goosander, constitutional peculiarity of, 197
Grafton, the Duke of, turf winnings of, in 1822, 12
Graham's (Sir Bellingham) opinion of the in-door system, 248
Grease, nature and treatment of, 328
Green meat, advantage of stinting hunters in, 251
Groggy horses, peculiar position of, in the stable, 153
Groom, necessary qualifications of the, 99, 203, 169
Grosvenor, Lord, a great breeder of race-horses, 12
Gouty, that horses may be, Professor Coleman's opinion, 183

Hack, difficulty of procuring a good, 13
Hack, requisite qualifications of a safe, 13
Hack, mode of trying the paces of a, 16
Hack, walking and cantering the chief paces for a gentleman's, 10
Hair of the horse, account of the, 311
Hair, warmth and friction contribute to the condition of, and why, 312

Hard meat *versus* grass, 111
Hard meat system, corroboration of the superiority of the, 120, 127, 215, 223, 227, 247
Hay, daily allowance of, for a hunter, 61
Hay, on the improper use of, in stables of fast coaches, 100
Hay, the best kind of for hunters, 201
Hay, the quality of, a first-rate consideration, 250
Hay, mow-burnt, debilitating effects of, 321
Hay and water, proper allowance of, on the day before hunting, 83, 199
Health, periodical evacuation necessary to preserve, 123
Health, the three great points to be attended to in the preservation of, 172
Heat and cold, remarkable extremes of, 227
Hermit, a celebrated hunter, particulars of, 64, 140
Hero, Mr. Mytton's horse, wonderful leap taken by, 4
Hind's (Mr.) remarks on shoeing, 406
Hoof, a wide circular, no proof of soundness of the foot, 145
Hoof, contraction of the, the effect not the cause of lameness, 342
Horse, the, held in high esteem by the ancients, 2
Horse, the bravest and fleetest of animals, 5
Horse, description of the, by a Frenchman, 6
Horse, fabulous origin of the, 7
Horse, high honours paid to the, by the ancients, 10
Horse and man, analogy between, as regards condition, 74
Horse, comparison of the, to an organ, 91
Horse, delicacy of the intestines of the, 179
Horse, necessity of preparing a, *well* before he goes to hounds, &c. exemplified, 195
Horse, best method of treating the, when in the stable, 203
Horse, signs of age in the, unconnected with the teeth, 454
Horse, proper way to examine the hocks of a, 459
Horse, smallness of the stomach of the, 482
Horse-stealing made felony, without benefit of clergy, *temp.* Edward VI., 11
Horses' coats, remarks on the colour of, 312
Horses' skins, the beauty of, when in "blooming condition," 74
Horses sensibly affected by change of weather, 76
Horses, form of alterative ball, recommended for gross, 253

Horses, fore feet of, method of treatment after a severe day, 274
Horses, convulsive disorders of frequent occurrence in, 282
Horses, the best method of treating the feet of, in the stable, 392
Horsemen, advice to, when on the road, 18
Humours, Osmer's definition of the term. *See* Foulness.
Hunter, not necessary that a, should be perfectly sound, 57
Hunter, a truss of hay weekly sufficient for a, 61
Hunter, remarkable case and death of an old, in Devonshire, 163
Hunter, the distinguishing symptoms of foulness in a, 175
Hunter, practical information on sweating a, in the middle of August, 183
Hunter, remarks on shoeing the, 408, 414
Hunters, elegance of form of English, 4
Hunters, danger of turning out for the summer, 33
Hunters, high condition of Lord Sefton's, 37, 159
Hunters, objections against turning out to a summer's run at grass, 38
Hunters, treatment of, during the summer, to obtain condition, 44
Hunters, turning out, under certain circumstances highly beneficial, 46
Hunters, remarks on the old plan of treating, 48
Hunters, system proposed on taking up, 50
Hunters, advice regarding the feeding and watering of, 62
Hunters, treatment of, after a hard day, 84, 86
Hunters, treatment of, the day preceding going out, 82
Hunters, treatment of, during the summer, 103
Hunters, treatment of, in August and September, 180
Hunters, the absolute necessity of administering alterative medicines to, when first beginning to work, 182
Hunters, treatment of, after a "*very hard day*," 185
Hunters, Mr. Weedon's method of sweating, 197
Hunters, the best kind of hay for, 201
Hunters, small quantity of green food in the summer sufficient for, 252
Hunters, beneficial effect of washing with warm water and soap, 254, 390

Hunters, detail of treatment of six, the property of the author, during the summer of 1825, 253
Hunters, turning out in the summer one of the predisposing causes of roaring, 449
Hunters, plan of stabling for eight, 474
Hunting, strong work indispensable the day before, 93
Hunting, the system of, revolutionised, 101
Huntsman and a gentleman, anecdote of a, 20

In-door system, proof of the superiority of the, 111
Inflammation, rapidity of, in cases of *overmark*, 85
Inflammation, the precursor of navicular disease, 149
Inflammation, copious bleeding in cases of, necessity of, 174
Inflammation, general and local, remarks on, 331
Inflammation, Mr. White's description of the term, 334
Inflammatory complaints, three causes of, 426
Interfering. *See* Cutting
Introduction, 1

Jersey (Lord), treatment of hunters belonging to, 161
Job, sublime description of the horse by, 2
Johnson's (Dr. Saml.) definition of the word "condition," 26
Joint, navicular, situation and office of the, 148
Joints, of the extreme sensibility of the, 150
Julius Cæsar, British cavalry famous in the time of, 7

Knee-caps, superiority of, manufactured by Messrs. Whippy, 287

La Fosse, liberality of, as a controversialist, 369
Lameness. *See* Foot Inflammation
Lampas, nature and treatment of, 427
Lampas, barbarity of burning the palate for, 428
Leaping bar, description and sketch of Mr. Dickenson's, 478
Legs, big, treatment of, 429
Life, blood, the mainspring of, 171
Lindo (Mr.), account of The Clipper, a horse belonging to, 14
Lindo (Mr.), description of his bridle for hard-pulling hunters, 275
Locked jaw frequently the consequence of docking, 318

Lockley (Mr.), treatment of a favorite hunter the property of, 160
Loose boxes, permanent objections to, for general use, 476

Mansfield, anecdote of Lord, 172
Mantidamun (Major Pigot's), constitutional peculiarity of, 197
Mare, description of the sort to breed from, 220
Mare, management of the, after foaling, 221
Mares, preference given to by the Arabians, 13
Mares, prejudice against, to be lamented, 12
Mashes, use and abuse of bran, 98
Maynard, anecdotes of Lord, 19, 131
Medicine, policy of administering gentle, after a severe day to prevent fever, 273
Mercurial physic, caution requisite during the operation of, 126
Mercurial plaster, in recent cases of enlarged joints, or tendons out of place, a useful application, 272
Mercurial charges, made by Mr. Field, supersede in great measure the necessity for firing, 271
Meteora, performances of, 13. Death of, ib.
Molten grease, notice of, 432
Moulting season, precautions to be taken in the, 167
Muscles, convulsive motion of the abdominal, after a long run, erroneously supposed to be the beating of the heart, 185; corroboration of this position, 230
Mytton (Mr.), high leap cleared by, on Hero, 4

Nails, test of the quality of, 414
Narrow feet, particular case of, in a gig horse, 154
Nature, the power of art over, exemplified in the case of Ferryman, 68
Naval officer, anecdote of a, 63
Navicular joint, disease discovered by Mr. Turner, 146
Navicular joint, the general seat of founder in the foot, 151 346
Nerving, effect of, 433
Nerving, manner of performing the operation, 434
Nicks, a highwayman, extraordinary performance of, 56

Oats, old, most proper for hunters, 201
Objections to the in-door system answered, 209
October, reasons for not hunting in the month of, 217, 267
Oil of turpentine, efficacy of, in spasmodic colic, 309
Old lady and her carriage horses, anecdote of an, 48
Organ, comparison of the horse to an, 91
Osmer (W.) on the Diseases of Horses, extract from, 214
Osmer's opinion of the effect of rest, 271
Ospray (Lord Foley's), constitutional peculiarity of, 197
Overmark, symptoms of, 84; and mode of treatment, 84, 174, 186
Over-reach, all horses subject to, 89

Paddocks, advantages of, 46
Parasol, constitutional peculiarity of the racer, 791
Pennant (Mr.), on English horses, 7
Percivall (Mr.), inventor of the horse-sandal, 133
Percivall's Lectures on the Veterinary Art, extracts from, on clipping, 239; Lecture 76, affections of the brain and convulsive disorders, 282; Lecture 38, broken-wind, 283; Lecture 33, broken knees, 288; Lecture 30, on the muscles of the hind extremity, 301; Lecture 32, corns, 303; Lecture 33, catarrh, 306; Lecture 55, diuretics, 320; Lecture 38, causes of diseased lungs, 338; purgation and purgative medicines, 438; roaring, 442; diseases of the teeth, 451; stables, 471; the stomach, 480
Peruvian bark, valuable properties of, 190
Pessina's (M.) remarks on teeth as denoting age, 453
Physic, general remarks on the operation and effect of, 435
Physic, danger of administering strong, 51, 165
Physic, mild mercurial, recommended in presence of the yellows, 183
Plethora, Boerhaave's definition of, 99
Potter (Mr.), the Earl of Sefton's groom, notice of, 159
Precautions to be taken in the moulting season, 167
Pumiced feet, the most difficult to preserve sound, 332; in hunters most commonly the result of fever, 334; treatment of a case of pumice, 334

Rabbit, Mr. Abernethy's experiment on a, 170

Race-horses, Lord Grosvenor a great breeder of, 12
Race-horses, wheat formerly given to, 60
Recreation, cub-hunting a melancholy, 56
Rest, ill effects of too much, 94
Rest, Osmer's opinion of the effect of, 271
Rest, misconceived idea that a summer's run affords to a horse, 278
Ringbone, nature and treatment of, 440
Roaring, the nature of, 441
Roaring, turning out hunters in the summer one of the predisposing causes of, 449
Rogers (*Mr.*), inventor of a shoe to ward off concussion, 354, 357
Rowels, use of and operation, 450
Rules, general, inapplicable to particular cases, 155

Salt, value of, in veterinary practice, 455
Salt marsh, on the benefit arising from a summer's run in a, 246; disadvantages and danger of the practice, 247
Sandal, description of the horse, 133
Sand-crack, treatment of, 457
Scotch physician and a regimental chaplain, anecdote of a 425
Scrofula, extract from Sir Astley Cooper's lecture on, 171
Sefton (Lord), superior condition of the hunters belonging to, 37, 159
Sheep, the bite of, sweetens the herbage, 46
Shoe, on preparing the hoof for the, 402
Shoe, the cast-iron concave seated, sketch of, 410; testimony in favour of, 411; objections to, 412
Shoes, variety of, 144, 353, 360
Shoeing, the antiquity of, 131
Shoeing, various methods of, in different countries, 135
Shoeing a hunter, method of, to prevent his cutting himself by over-reaching in leaping brooks, or in deep ground, 88, 233, 376
Shoeing, not a general cause of foot lameness, 343, 378, 384
Shoeing, when executed on the principles of Nature, a protection and preventive of disease, 343
Shoeing, remarks on, by a sporting Baronet, 373

Shoeing, remarks on the French system of, 401
Shoeing, the great art of, to consult the natural tread, 403
Sinews, lameness in the, treatment in cases of, 464
Skin, state of the, always a criterion to judge by as regards general health, 182
Smith on Glanders, extracts from, 116, 207
Sole, description of the inner, 391
Sore back, treatment of, 466
Soundness, original form of the foot unconnected with, 134
Spasmodic colic, efficacy of oil of turpentine in cases of, 309
Spavins, nature and treatment of, 457
Splents, notice of, 459
Sportsmen, strong prejudices against mares, by, 12
Sprain, Taplin's definition of a, 464
Sprains, the grand specific for, 465
Spring, the best time to purchase hunters, 68
Stable and stable management, 64
Stable, to be good, must be warm and dry, 72
Stable, best method of treating a horse when in the, 203
Stable, benefit of free circulation of air in the, 424
Stables, temperature of, 77, 424, 472
Stables, the evils attending ill-ventilated, 469; damp, 471
Stables, Mr. Dickenson's plan to prevent the waste of corn, 477
Stables, plan of for eight hunters, 474
Stables, the importance of cleanliness in, 473
Staked horses, 460
Stallion, description of the proper, for breeding, 220
Stallions, treatment of the feet of covering, 393
Stawell's (Lord) recipe for delicate feeders, 189
Stopping horses' feet, Cherry's elastic pads for, 394
Strangles, symptoms and treatment of, 461
String-halt, a few words respecting, 463
Strong work indispensable the day before hunting, 93
Stubs, in frogs and fetlocks, treatment of, 484
Summer, treatment of hunters in the, 103, 110
Summer of 1825, detail of treatment of six hunters, belonging to the author, during the, 258
Summer's run, proof of the disadvantages of a, 119, 215

Summering hunters in the field, evils attending, 161, 164
Summering in the stable and at grass, comparative expenses of, 260
Surfeit, symptoms of, 175; treatment in cases of, 176
Sweats, the benefits resulting from gentle, often repeated, 93
Sweating, detail of practical information regarding a hunter in the middle of August, 183
Sweating hunters, Mr. Weedon's method of, 197

Taplin's (Mr.) state of the veterinary art at the time of his writing the Sporting Dictionary, 176
Tartary, famous for its breed of horses, 9
Teeth, remarks on the, 451
Teeth, signs of age in the horse unconnected with the, 454
Thermometer, the importance of keeping a, in stables, 472
Thick wind, nature and treatment of, 479
Thorns in legs, frequently difficult to find the seat of, 484
Thornton, Col., anecdote of the late, 136
Thorough-pin, treatment of, 486
Thrushes, observations on, 394
Timid animals hardest to be tamed, and why, 5
Tonics, the influence of, in promoting condition, 425, 490: *mineral* tonic ball, recipe for making, 218
Training, remarks on, 93, 100
Training conducive to health, 102
Treatment in cases of overmark, 84, 174
Treatment after "a very hard day," 185
Trotting match, particulars of a, 19
Turner (Mr.), discoverer of the seat of the navicular disease, 146

Ventilation, the necessity of, in stables, 469, 472
Vetches, when in pod, injurious to horses, 46
Veterinary surgeons, policy of encouraging, 104
Veterinary science, first principles of, in this country, originated with Mr. Coleman, 144
Victoria (Lord Oxford), constitutional peculiarity of, 197

Wales, foot-lameness seldom seen in, and why, 347
Walking exercise, during the summer, advantages of, 160

Warde's (Mr.) opinion respecting old and new oats, 60
Water, the importance of minutely attending to the quantity given, 83, 199, 203
Water, change of, quickly affects horses in condition, 201; danger of giving cold after a severe run, or when in a profuse sweat, 202
Weather, horses sensibly affected by change of, 76
Weedon (Mr.), Lord Plymouth's groom, notice of, 153; his method of sweating hunters, 197
Whippy and Co., advantages of the knee caps made by, 287
White's Veterinary Dictionary, extract from, 118
Wilde's (Mr.), veterinary surgeon of Oxford, opinion of the effect of grass on a hunter, when left to his own discretion, 251; advantage of stinting horses in green meat during the summer, evident in winter, proved to demonstration, 251
Wind, general remarks on, 192
Windgalls, nature and treatment of, 486
Winnings of the Duke of Grafton in 1822, 12
Winter's run, advantages of a, as regards legs and feet, 47
Wisdom, infinity of divine, 1
Worms, treatment of, 487

Yellows, treatment of, 183, 488
York (Major Pigot's), constitutional peculiarity of, 197
Young hound and a dying fox, anecdote of a, 194

THE END.

Express from one
to two ounces per day according
to the strength of the horse
[illegible] should be given
in Pellets or in powder
the food or in balls. If in
powder or in balls great care
to be taken to reduce it to
an impalpable powder
by the operation of the medi
to be judged of by the co
of the Pupil and the pulse
administered not to be frequent
than is sufficient to produce
ing of a black or dark
ion. The horse to be well
ed and moderately worked.
dose of mild physic to be gi

169